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THE ART OF
THE CAVE DWELLER

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ALTAMIRA AND FONT DE GAUME POLYCHROME

(i) Altamira, Hind.

(ii) Font de Gaume, Wolf

(iii) Altamira, Bison

THE ART OF THE CAVE DWELLER

A Study of the Earliest Artistic Activities of Man

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WITH FRONTISPIECE IN COLOUR,
95 HALF-TONE PLATES 58 OF
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LONDON

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PREFATORY NOTE

THE aim and scope of the following pages are explained in the Introductory Chapter and need not be touched on here.

In this place all that has to be said is of personal reference, and expresses what must have been felt by every recent worker in the field covered by this book, towards the experienced scholars who have opened to them freely their treasures of pre-historic lore. The first name that must inevitably occur in this connection is that of the Abbé Henri Breuil, among cave experts *facile princeps*, who is always ready to help others, not only as a duty to science, but as the expression of his own native kindness of heart. The policy of the *Institut de Paléontologie Humaine*, where he is Professor, has always been one of marked liberality, and the splendid volumes which the late Prince of Monaco's munificence enabled its staff to produce¹ have been opened widely to furnish illustrative material for many workers in France and beyond her borders. The present writer has of course relied as far as he could on illustrations based on his own negatives taken in and about the caves, numbering a third of the total here shown, but the book would have been nothing without the Abbé's scrupulously faithful outline delineations of the fauna of the caverns, which are often necessary for making the direct photographs fully intelligible. For permission to avail himself of these drawings, the writer is sincerely grateful. In the necessarily numerous

¹ These volumes, called for brevity's sake 'the Monaco books,' are referred to in the text under abbreviated titles—*Astarac, Font de Gaume, Cavernes Cantabriques* (Cav. Cant.), *La Pazege, Grotte di, Combarelles*. They were published between 1906 and 1924, but that entitled *Les Grattoirs de Grotte de* is not yet terminated.

references to the Abbé and his work there may be read between the lines the expression of a more intimate personal feeling than just the natural appreciation of his gifts and energy and gratitude for kindly help so freely rendered. The remembrance of hours of work and of recreation spent in touch with him will always remain among the writer's cherished possessions.

Professor Marcellin Boule, as Director of the *Institut*, and Editor of the invaluable Journal *L'Anthropologie*, has exhibited the same kind liberality, and so has Dr René Verneau, whose illustrations in the *Grimaldi* book are of great value for the subject of Personal Adornment. Equally open-hearted have been the authors of the fully illustrated book on the discoveries at Limeuil, Dr L. Capitan and the Abbé Jean Bouyssonie, who have allowed the reproduction of a good many of the highly interesting incised drawings on stone noticed in the following chapters. Messrs Alphonse Picard et Fils have been good enough to allow the use of four illustrations from Déchelette's *Archéologie Préhistorique*. The more popular pieces of palaeolithic art that have long been known have been so often reproduced that they have become as it were common property and appear on picture post-cards, while in the case of some other pieces it is difficult to find out where they originally appeared. In cases where there has been an omission to apply at the fountain-head it is hoped that the writer will be forgiven.

As Professor of Pre-history in the University of Toulouse, Count Bégouen has under his eye the wonderful caves on the French side of the Pyrenees, and presides also over the rich archaeological treasures in the Toulouse Museum. The Count is hereby thanked for valuable information and advice concerning the antiquarian material of the region. Across the Pyrenees the writer sends his grateful acknowledgements to Catedrático Obermaier of the University of Madrid for allowing the reproduction of some of the figures illustrating

the so-called Capsian rock paintings, which he published in his work *El Hombre Fósil*. Specially to be remembered is the great kindness shown to the writer, when he visited the Spanish caves, by the experienced archaeologist Don Hermilio Alcalde del Rio, who has done so great a work of discovery and investigation in the Santander Province. The long hours spent with him in such caves as Castillo and La Pasiega will always be remembered. From his work, an early publication of 1906 on the caves, entitled *Las Pinturas y Grabados de las Cavernas Prehistóricas de la Provincia de Santander*, has been taken by his kind permission the plan of Castillo.

The Authorities of the British Museum have been good enough to sanction the borrowing of a couple of illustrations from their official publications, while Professor Henry Fairfield Osborn, of the American Museum of Natural History, has kindly allowed several illustrations to be reproduced from his book, *Men of the Old Stone Age*. Thanks are due to the proprietors of the *Glasgow Herald* for leave to use matter which has appeared in other forms on its pages.

Personal indebtedness is keenly felt by the writer towards Mr Miles Burkitt, of Cambridge, whose experienced counsel on the details of cave exploration has been of the greatest value. For introductions and advice the same thanks are due to Sir Smith Woodward, to Professor Macalister, and to other archaeological friends, and the writer's colleague, Dr James Drever, has been most helpful to him, when with some hardihood he has ventured on the field of experimental psychology.

The reader is asked to note that cross references from one part of the book to another are always put within brackets, to distinguish them from references to other books which may just before have been quoted. Attention is asked for the note preceding the Index.

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CHAPTER I

INTRODUCTORY

MANY books have recently appeared on the palaeolithic period, and in all there has been fully emphasized the overmastering interest of the artistic side of the primitive culture of those times. The theme is however by no means exhausted, and indeed the problems it presents seem to increase in complexity the more the subject is examined. The main problem is the real motive and intention of the animal representations, and for nearly a quarter of a century this question has been settled, perhaps in rather too ready and absolute a fashion, on the theory that the intention was magical, the representation being deliberately designed to exercise some dominant influence on the original. In connection with the life of the palaeolithic cave dwellers in general there appears to be abundant evidence of the exercise of magical rites with a certain apparatus and personnel for their performance, and it is a common assumption that the apparatus was mainly devoted to establishing by mystical procedure this connection between representation and original. This is a process however which would take time, and one is forced to ask about the earliest animal representations whether this theory of their origin can be maintained. Such representations must have been already in existence before magical agency was evoked and elaborated to secure the desired connection between semblance and material verity, and M. Luquet¹ very reasonably urges that there must have been art as art before there could be art as magic, and

¹ G. H. Luquet, *L'Art et la Religion des Hommes Fossiles*, Paris, Masson et Cie, 1926.

we may question the strict accuracy of the phrasing of Professor Macalister when he writes 'it cannot be too often or too clearly stated that these pictures of animals had not, primarily, a merely aesthetic purpose, though we may admit that a skilful artist would have taken a pride in his work.'¹ The primary motive, in the strict sense of the term, was certainly artistic, though there was also a secondary motive the relation of which to the primary motive calls for careful consideration.

It is one of the chief purposes of the chapters that follow to arrive at some clear idea of the relation between the artistic and the non-artistic, or magical, elements in these animal drawings, for both of these elements exist and it is idle to ignore either the one or the other. The baleful presence of the medicine-man haunts the caves, and at Trois Frères² he seems to be exercising some sort of supremacy over the beasts that are grouped beneath him, though one revolts against the idea of the scabrous creature in any way dominating those clean, spirited quadrupeds in which the palaeolithic artist took such delight. It is the same feeling we experience today when we see the simplicity and keenness of the greyhound exploited by the Yahoo propagandists of betting.

With regard to the medicine-man however and all his works and ways, he is busy in the world of today, and by no means only in its uncivilized regions, and he answers to tendencies in human nature that are always in evidence. Some favour naturally the medicine-man and all he stands for, for they are constitutionally attracted by anything mystical that suggests

‘forests, and enchantments drear,
Where more is meant than meets the ear,’

while others again are by nature prone to find a simple and human explanation of phenomena which the first prefer to

¹ *A Text Book of European Archaeology*, Cambridge, 1921, p. 504.

² See Fig. 115 (p. 167).

wrap up in mystery. Among prominent anthropologists who have dealt with the subject of these chapters, M. Marcellin Boule on the whole takes the simple view, while Catedrático Obermaier in his *El Hombre Fósil*¹ seems to divine the medicine-man round the corner at every turn of the pre-historic caves. It may be acknowledged at once that the present writer belongs to the former school, and regards the medicine-man as an inevitable by-product of humanity, of equally doubtful value whether in the pre-historic caves, among the savage tribes of today, or camouflaged in a mediaeval or neo-mediaeval dress. Hence it will not surprise the reader if he find in later chapters suggestions favouring a simple and human explanation for appearances which are commonly supposed to rest on a magical basis.

If a theory be put forward later on which bases the phenomena of the earliest animal representations on the primitive mentality of those who executed them, rather than on formal magic (p. 154 f.), this theory has really been forced upon the writer by the actual facts of palaeolithic art. So soon as this art came to a knowledge of itself those that practised it millenniums ago in the caves fastened upon the forms of nature in the animal world, and observed them with intelligence and insight through eyes that were certainly open to the elements of beauty which so many of these animal forms presented. The abundant reproductions give evidence of these qualities and even show the natural aesthetic instinct developing into a sense of beauty. Incisive observation, interpretive rendering, appreciation of grace and dignity of form—these qualities begin to be in evidence comparatively early in the development of the animal art, and the remarkable fact about this art is that it advances in the directions indicated even after magic had in the opinion of most authorities effectively set its seal upon it. To all seeming bound in the service of an alien non-artistic potency, it continued to be as observant,

¹ 2nd Ed., Madrid, 1925.

as bright, as keen on variety, as conscientious in detail, as ever it was, and never takes on that dull monotonous uninspired aspect assumed generally by an art that has become 'hieratic,' that is, bound in the service of a religious autocracy like that of the Egyptian priesthood or the savage medicine-men.

This curious innocuousness in the case of the cave art of a malign influence that as a rule deadens the pulse of artistic energy is the basis of the opposition on the part of M. Marcellin Boule to the generally received magical theory, for he maintains that art is one thing and magic quite another, and that if you mix them you run a great risk of spoiling your art.

Those who are disposed to acquiesce in a large element of magic in cave life as a whole, but who are puzzled by the very secondary appearance it seems to make in the cave art, will be immensely fortified in their anti-magical attitude by the striking phenomena presented by the comparatively recent discoveries at Limeuil in the Dordogne, published in 1924.¹ At Limeuil there came to light a large number of animal representations belonging to quite a late phase of this whole artistic period, that instead of exhibiting any hieratic features express little beyond the happy insouciance of an art that is its own mistress and is bound in no external service. The word 'little' is used here in place of the word 'nothing,' because among the Limeuil pieces there are one or two that may be regarded as magical documents, but they are so few that they may be claimed as the exceptions that bring into prominence the general rule. It is certainly remarkable that practically no notice has been taken of the striking aesthetic features of these Limeuil representations in any of the archaeological books of the last three or four years, for they are features which 'donnent furieusement à penser,' to those who

¹ *Limeuil, son Gisement à Graffures sur Pierres de l'Age du Renne*, par le Docteur L. Capitan et l'Abbé Jean Bouyssonie, Paris, Nourry, 1924.

note their freshness and naïveté, and reflect that they illustrate a late period in an art that is supposed to have been carried on for thousands of years under the direction of that most in-artistic person the medicine-man. They seem in fact to flout the expert in magic and to perpetuate until near the close of the culminating period that easy, cheerful, energetic spirit which marked the art from the first. If it actually wore the shackles of utility or of mumbo-jumbo it carried these so lightly that it is the freedom of the art that remains its chief characteristic to the end. This apparent paradox will of course furnish matter for subsequent discussion.

Apart from this problem of absorbing interest to which these few preliminary sentences have been devoted, there are one or two other questions that may suitably receive attention at the outset. In the first place there has to be acknowledged, and so far as is possible removed, a certain dubiety which may be met with on the one side among votaries of science and on the other side among artists. The former as a general rule know the pre-historic work in question from reproductions, especially from the copious illustrations in the great volumes financed with so much public spirit by the late Prince of Monaco. These are in the vast majority of cases based on careful drawings by the practised pencil of the Abbé Henri Breuil, who has devoted a great part of his life to the work. His bona fides and conscientious attention to detail are of course universally acknowledged, but many scientific students may feel constrained to doubt, first, whether these twenty-thousand-years-old drawings can really be made out, and, secondly, whether the draughtsman, being human, has been able to keep himself from unconsciously completing, and a little beautifying, the representations. Mr Vernon Blake, in his recently published *Art and Craft of Drawing*,¹ remarks in a note on his page 104, 'I have not examined the original

¹ Oxford, 1927.

drawings' (at Altamira) . . . 'Doubtless M. l'Abbé Breuil's copies are . . . "improved.'" This naive remark at any rate indicates what the popular view might possibly be.

Now of course the state of preservation of the paintings varies very greatly, and in many cases the pigment has almost disappeared. A vast number of paintings however remain in the now very numerous caves and rock shelters in a state of preservation that can be judged from the specimens reproduced in sundry illustrations that follow, which are from the writer's own untouched negatives taken in the caves themselves. The Monaco volumes also contain numberless original photographs, with which, as *pièces justificatives*, the readers are invited to compare the gifted Abbé's delineations. If they do this they will attain to satisfaction with his accuracy in general form and detail, without having to go to Altamira.

In the case of delineations in incised lines, these are of different degrees of depth, and even the shallow grooves remain clear where the rock is of good quality and where they are not obscured by stalagmite. When the stone is soft and crumbly they may in parts be lost, but as a rule, if a light be held so as to shine across the groove and not along it, the lines are substantially legible, though confusion may often be caused by the crowding of drawings together and their encroachment one on the other. In such a case it might very well happen that two equally conscientious and equally skilled investigators would not always arrive at the same reading. On the whole, the scientific student may be satisfied that he is dealing with evidence which alike in quantity and quality is fully satisfactory, and which is in no degree garbled.

Another difficulty that may possibly present itself is the following. 'These writers,' it may be said, 'who express themselves so enthusiastically about the merits of Magdalenian animal design, are archaeologists not artists,' and it is well known that those uninstructed in art will admire for their

likeness to nature graphic representations that to the artistic expert are of the crudest possible description. Dante, when he climbed the Mount of Purgatory, saw under his feet scenes and personages represented on the pavement whereon he was treading, and these seemed to him so effective that

' Better than I saw not who saw the truth,'

though they can only have been the sort of simple outline drawings inlaid in the stone floor that one sees in the Duomo at Siena. The achievements of the modern pavement artist excite the wonder and admiration of the man in the street.

With this in view, many will want to know what the artist and the artistic connoisseur say about the drawings, and will put the antiquary for the moment aside. To obtain however a sound artistic judgement from the professional side in a matter of this kind is none too easy, because the artist's mind moves rapidly, and the answer to any question that arrests it is apt to present itself like a flash and is forthwith announced as an inviolable truth to be maintained against all argument to the contrary. Most artists would probably say off-hand that drawings belonging to so remote an epoch could not be artistically meritorious, and it might be difficult to win them over to take the trouble of criticizing them seriously. What we want is the considered judgement of an artist accustomed to weigh and balance opinions, and familiar with other phases of art than those which happen to come within his own special range. Considerable attention is paid to palaeolithic art in the above mentioned volume by Mr Vernon Blake on the Art and Craft of Drawing. Mr Blake writes as a practical draughtsman and at the same time as a professed aesthetician, and what he says is of special worth from the present point of view. Some of his judgements will be quoted and reviewed in the sequel (p. 232 f.). Of a more purely literary order are the disquisitions on the Altamira Bisons and the like in *Die*

*Malerei der Eiszeit*¹ by Herbert Kühn of Köln, and the same writer's work of more extended scope *Die Kunst der Primitiven*.² This author may be held extravagant in his laudation of the qualities of palaeolithic design at its best, but at any rate he writes as a professed critic of art and not only as an antiquary.

There has sometimes been assigned to the drawings in the caves a character of special accuracy in the rendering of the movements of the limbs of animals. These movements have now been analysed by instantaneous photography, and our conventional methods of representing, say, a galloping horse, have been shown thereby to be scientifically incorrect. It has been claimed for the pre-historic hunter that his discernment of the truth in complex motions, such as those of the four legs of a horse, was superior to that of the modern draughtsman. It is worth while making some inquiry into the truth of this, but a preliminary caution is advisable. Anyone inclined to paradox might claim the Muybridge photographs of animals in movement as a proof of the superiority of art over nature, for as a rule the correct renderings do not suggest motion nearly so convincingly as the old familiar delineations now proved to be false. Any illustrated paper that gives pictures of the finish of races will furnish proof of this in the ungainly attitudes in which the limbs of swiftly moving horses appear in the instantaneous photographs. One of these papers reproduced recently an engraving of the finish of the Derby in 1839, and the horses with forelegs stretched out in front and hind legs to the rear are going like the wind, while of the correctly rendered specimens in a modern race shown on the same page the less said the better. In the old incorrect representation the sense of motion is conveyed by the extended forelegs that seem to devour the ground in front, while at the back it is vigorously spurned

¹ München, Delphin-Verlag, 1922.

² ibid., 1923. Herbert Kuhn represents Pre-historic Art as Privat-Dozent in the University of Cologne.

away. In the instantaneous delineations there are some moments in which this same impression would be conveyed were it not that one of the four legs gives the situation away and contradicts the idea of movement forwards. We shall see in the text (p. 231) that the Magdalenian artist in one of his most belauded figures, that of the galloping Wild Boar at Altamira, frankly adopts the conventional attitude of the limbs just described. There are one or two instances however in which one of the abnormal poses of a limb seems to have been noticed by the keen eyes of the hunter of the caves and reproduced with accuracy though perchance to the detriment of the artistic effect (p. 232 f.).

The foregoing paragraphs have been occupied with only one phase of the activities of pre-historic man, though it is one of such extraordinary interest that it seems to overshadow all the rest. The scope of the book as a whole embraces however far more than the special theme of the animal art of the caves. As the sub-title indicates, it is the earliest artistic activities of man as a whole that constitutes its theme, and some of these may have begun long before the appearance of the lifelike studies of animals of which we have been speaking. In other words the Aurignacian man (p. 50 f.) who is commonly hailed as the first artist was only the first artist in the sense that he was the first to turn his artistic powers in the direction of the representation of nature. He was the first painter and probably the first sculptor, but in the present state of our knowledge we cannot call him in an absolute sense the first artist. As a fact all the forms of art practised by man throughout history have their beginnings in pre-historic times, and all but architecture can be traced back to the older stone age. With regard to architecture, it is conceivable that the huts, or shelters half hut and half tent, that appear to be represented in those enigmatical so-called 'Tectiform' devices which we shall see later on side by side with the animals on the walls

of the caves (p. 89 f.), may have been put together with some sense of proportion and balance, but the monumental element would necessarily have been wanting. Architecture as distinct from mere building is an art that calls into existence forms imposing in their dignity which produce on our minds the impression of the Sublime, and any slight structures that palaeolithic man can have set up would not answer to this description. His dwelling places in the later palaeolithic age may have been monumental and sublime enough, but they were not his work but nature's. It was reserved for neolithic man to give expression to the monumental idea in the vast stone masses that he reared with some memorial intent, and which are in their way among the most impressive achievements of humanity at large.

Putting this particular form of art on one side, we have as forms of pre-historic artistic activity, personal adornment, the adornment of the implement, pattern making and decoration generally, and the dance, as well as sculpture and painting, and the first question we have to ask about all these is What they have in common. If we can determine any principles which apply to all these early forms of art, we have learned something about them of the first importance, and we have done more than this, for as regards its essential character art is the same in all ages, and what we can get to know about it in its beginnings applies to it throughout all the ages of its after development. This, it will be seen, gives a certain actuality to the discussions which will follow about the earliest ascertainable artistic facts, for what we find to be true about these under the simple conditions of their time may be held with confidence to apply to our own far more complex later days, albeit the artistic facts cannot now be isolated from their multitudinous surroundings so easily as is possible when phenomena and conditions are still in their paradisaical simplicity.

It will probably be recognized readily as true about all the

early arts just mentioned except the two last, that they do not begin by being arts at all. Artistic feeling does not make its first appearance in the shape of a motor force which demands the opportunity to externalize itself in activity or production. It is true of course that artistic feeling must be latent in man from the first, but it does not declare itself, and still less does it assert itself spontaneously as a yearning as if it needed expression. The latent artistic feeling shows itself first, as we shall go on to see, as a regulating not a motor agency. It does not create art, but it gives an artistic form to activities and products that had a previous existence quite independent of art. The fundamental fact from which we have to start can be stated in a sentence and is expressed in the simple formula *every artistic activity and every form of artistic production is preceded by similar activities and similar forms of production that are not artistic.* They are at the outset non-artistic but become artistic at a later stage through a process that to the present writer seems to constitute one of the most interesting psychological phenomena that the anthropologist meets with in his examination of primitive man. This process consists in bringing to bear upon the activity or the product the principle of Form, manifesting itself as arrangement, rhythm, composition, and bringing into an ordered relation parts or elements that were before dispersed and irregular. How this comes about in the various artistic activities just enumerated will be seen in the later chapters of this volume, but something further must be said about the beginnings of the representative arts of painting and sculpture, in the case of which, as was noticed above, the simple formula proposed for the arts as a whole may not at the first moment find acceptance. The formula lays it down that the initial movements in what are to become arts are non-artistic, while the artistic element comes in later as a regulative agency, but it will be objected here that the initial movements in the art of animal delineation are already in themselves artistic, and proceed to all appearance

from an artistic impulse. The real truth however, as we shall come to see, is that the primary impulse is the impulse to imitate, and imitation is not in itself an artistic act. The formula therefore taken in the strict logical sense holds good, though it often happens that in the act of representation an artistic element comes in so soon to modify and improve what is at first mere delineation, that on a superficial view the artistic element may be held to be present from the very first. This is not however the case, and in what follows a good deal of space will be taken up with an endeavour to determine wherein this artistic element consists ; how it first makes its appearance ; and to what extent it is developed during the long period when this representative art was still flourishing. The development, if indeed this word may be used at all, was for millennium after millennium not sufficient to indicate a general artistic advance, though here and there throughout the long period we find promising beginnings that did not however fructify.

It will conduce to clearness if this rather difficult subject of the analysis of the artistic element in the graphic work of the cave dweller be transferred to the sphere of the concrete, and elucidated so far as may be by a study of actual examples of the work in question. With this in view there is introduced here a brief discussion of a special theme that illustrates the standpoint from which primitive art is approached in these chapters, and also brings before us objects and facts of great intrinsic interest.

It is common knowledge that among early manifestations of art which we find in the caves and rock shelters of Northern Spain and Western France drawings of animals bulk very largely indeed, and of the animals thus delineated a special interest attaches to the Mammoth, for the reason that, with one companion, the Woolly Rhinoceros, he alone among all the creatures portrayed is now extinct, a fossil geological

creature no longer represented among the actual fauna of any part of the earth of today. That man was contemporary with this fossil beast, and not only lived at the same time but was familiar enough with him to take his portrait, is a very striking fact indeed, and gives us a better idea than any other fact of the kind of the immense distance to which we can now carry back the history of human culture.

There exist quite a fair number of delineations of this creature in the form mostly of incised engravings on the walls or roofs of the caverns just referred to, as well as a few representations of him modelled or carved in the round, and one remarkable drawing of him in incised lines on a piece of the ivory of his own tusk. Some of these will presently be figured and described, but a few words may be said first on the beast himself, for he is almost unique among fossil animals in that though he became extinct thousands of years ago, the actual creature himself—bones, flesh, integument and all, and not only his petrified skeleton—has been in more than a score of known instances preserved through refrigeration to our own time. On the zoology of the Mammoth from the comparative point of view the present writer cannot presume to speak, but the probable aspect of the creature when in life may be judged from Fig. 1, reproduced by the kindness of Professor Henry F. Osborn, of the American Museum of Natural History, from a drawing in the Museum by Charles R. Knight. A word or two may be said on this remarkable fact of his preservation. The Mammoth, the scientific name of which is *Elephas Primigenius*, differed from the modern elephant in the possession of a shaggy coat of hair obviously a protection against the cold. The modern elephant of Africa and India as we know him at the Zoo is a smooth-skinned beast, but Mr Bassett Digby, the author of a recent monograph on the Mammoth,¹ makes the interesting statement that 'the adult

¹ *The Mammoth and Mammoth-Hunting in North-East Siberia*, by Bassett Digby, F.R.G.S., London, 1920, p. 6c.

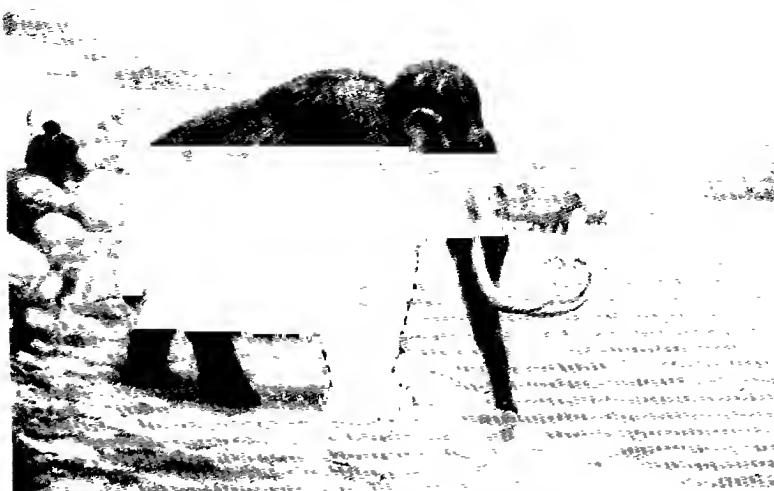


FIG. 1. Mammoth restored. Reproduced by kind permission from *Men of the Old Stone Age*, by Professor Osborn.

Asiatic elephants in the cool mountain altitudes of Siam, Burma and Malaya are often noticeably hairy, and almost all Asiatic elephants are born hairy,' a fact suggestive of zoological continuity. The hairy coat of the Mammoth is greatly in evidence in all the palaeontological representations of him, and in not a few cases it has actually survived. The most interesting example is that one of the twenty Mammuths noticed by Mr Digby that has found its way to the Palaeontological Museum in the Jardin des Plantes at Paris, where it is being set up. The skin, a good deal of which has survived, seems to vary in thickness from about half to a quarter of an inch, and is well preserved on all the four legs where it is covered first with a short, soft, woolly fleece, over which is a fell of wavy hairs, eight or more inches long, not very coarse, and of a light yellow hue. The skull of this Mammoth, which Mr Digby says is the Volosovitch specimen of 1910, has the 'd^efense' on the sinister side preserved in its original position. The Mammoth tusk is sought after as a source of the supply

of ivory, and the quest is a speculative one, for the expert here quoted reports that it is a chance whether tusks obtained in North-Eastern Siberia will 'prove to be fine, unblemished stuff,' fit for billiard balls, or 'merely crumbling rubbish.'¹ It has also been the subject of considerable discussion, because its immense size and its double curves would seem to make it rather an impediment than an aid to its possessor. Its average size exceeds that of the tusk of the modern elephant but very large elephant tusks are as large as any but a few exceptional ones of the Mammoth. Both animals may have tusks that run to ten feet in length along the outer curve but Mammoth tusks of as much as thirteen feet or more are known. The ordinary elephant tusk is however much shorter and is used effectively in digging for water beneath the dried surface of stream-beds, and also in rooting up bushes and young trees. It is also more even in its curve, whereas the Mammoth tusk is not only longer but has commonly a double curve. 'There is a curious "writhe" to most—though not all—of them,' writes Mr Digby,² 'when you drop them on the ground they do not lie flat.' In the case of most Mammoth skulls in Natural History Museums there is some doubt as to whether the tusks are rightly placed. In the specimen in the Jardin des Plantes at Paris the sinister tusk is actually *in situ*, and shows a very marked secondary curve directed inwards, so as to produce a decidedly awkward implement, at any rate for digging purposes, though it would catch and pull down the branches of leafy trees effectively enough. The integument of the head, legs, and tail of this creature has been preserved, and these parts will in time be mounted for exhibition in the Museum.

The Mammoth, though honoured by the proud title of *Elephas Primigenius*, who should be the original ancestor of the elephant tribe, was by no means the earliest specimen to make its appearance in Europe for it was preceded by an

¹ *The Mammoth*, p. 166.

² *ibid.*, p. 171.

Elephas Antiquus and an Elephas Meridionalis. These were however inhabitants of warm climates and were hairless and furnished with short straight tusks, like the elephants one rides on in the Zoo. It is noteworthy that the Mammoth, a cold creature, makes no appearance in Spain though it was common in South-Western France. Two specimens of Elephas Antiquus seem to be figured in the painted caves of Northern Spain, though only in the form of rough sketches. They are shown on the upper part of Fig. 2 under the letter A, and may be compared with the Mammoths in the rest of Fig. 2. The one is from Castillo, the other from Pindal, in the Santander province of Northern Spain. There is a fairly complete skeleton of Antiquus in the Natural History Museum at South Kensington.

The question, How the Mammoth became extinct, is one we need not enter into, but a word may be said about the conditions under which the creatures that have been preserved to our own time may have come to their death. These specimens, opines Mr Digby,¹ 'were just a very few which happened to fall into a deep, steep-sided crevasse, filled with snow, on the eve of, or during, a blizzard, which filled in the hole behind them—when they themselves did not fill it in by their struggles.' 'Up north,' he continues, 'the mammoth country'—that is the frozen region of the Siberian tundra—'has countless riparian gullies which are full of snow all the year round for years on end,' and into some one of these he believes each of the Mammoths of our museums fell, and unable through its weight and ungainliness to extricate itself remained there in what he calls 'cold-storage' till our own time. These are exceptional cases, not cases of normal extinction, which he thinks was brought about by the agency of man who pursued the creature relentlessly for food, rather than by any cataclysm of nature.

The representations of the Mammoth in the mural paint-

¹ *The Mammoth*, p. 55.

ings of the caves bring the length and marked curvature of the tusks fully into evidence, though naturally enough the subtle double curves are not mastered. Indeed these Mammoth representations are from the artistic point of view by no means up to the average standard of the animal art of the caverns. As will be seen as we advance, the palaeolithic artist possessed as a rule a nice appreciation of line. He will often draw the curves of the dorsal line of the Horse in a way that exhibits a real sense of beauty, and the slender daintiness of the legs of Cervides or of the Reindeer, is not seldom most deftly rendered. The lumpy form of the Mammoth, with its heavy fell and clumsy almost jointless limbs, offered no attractions to an eye that delighted in grace and cleanliness of outline, and hence it is that the numerous incised drawings of the creature are for the most part mere sketches, loosely executed though emphasizing the main characteristics of the species. A conventional type was in fact established exaggerating some of these characteristics even beyond what nature justified. A number of outline drawings or rather engravings of the creature exist and specimens are shown in Fig. 2, a to f. It will be observed that the forehead is always immensely high, while the rounded back slopes away very rapidly towards the hind quarters, so that the general profile is that of a very high but short animal. The tail which is commonly indicated is rather short and stumpy, agreeing in this with the actually preserved tail at Paris, though in some few cases it is indicated as hairy. A large proportion of the existing Mammoth representations are incised drawings in two neighbouring caves of the Dordogne district, and this may be held to explain their close adherence to a single type. Other Mammoth drawings however in other parts, and notably a carving of the creature in the round in a lump of Mammoth ivory found far away at Předmost in Moravia, b, show just the same stocky form of tall but abbreviated proportions, so that this may be accepted as the established shape

THE MAMMOTH

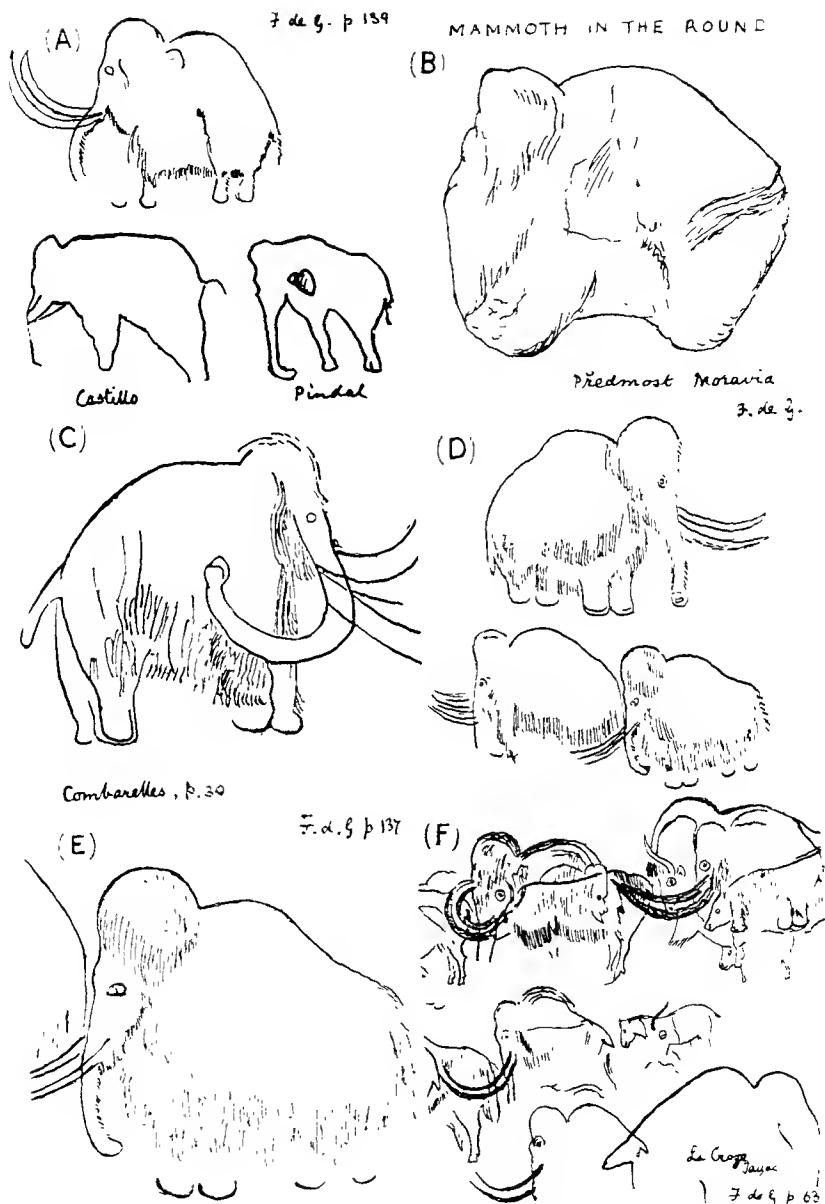


FIG. 2, MAMMOTHS AT FONT DE GAUME, LES COMBARELLES, ETC.

under which the creature was universally envisaged. The sketches, summary as they are, bring out the characteristic features as well as the general build. Thus, c gives the detail of the end of the trunk, and in r, where there is a medley of creatures not all Mammoths, the size and in one example the exaggerated curvature of the tusks is emphasized.

The last of these representations to be studied is a piece of surpassing interest from its intrinsic quality and one moreover that is of special moment for its bearing on our distinctive subject the Beginnings of Art. It is an incised drawing of a Mammoth, Fig. 3, A, B, on a smooth slightly rounded piece of Mammoth ivory measuring about eleven inches by five. It is for the purpose in view an all-important question whether the piece of ivory at the time the drawing was made was of the same size and shape as it is at present. The distinguished palaeontologist, Professor Marcellin Boule, who presides over the Museum in the Jardin des Plantes at Paris in which the piece is enshrined, has been good enough to give his opinion on this question, and by an examination of the edges of the piece, to which adhere remains of the earth in which it was found embedded in the floor of a rock shelter, he was able to pronounce that 'à très peu près' it is the same now as it was when under the artist's graving tool. Some small bits seem to have broken away from the edges, notably at the dexter end and below at the sinister end, and it may be noted that the material is in the condition into which Mammoth ivory is not seldom brought by time, a condition in which the layers of it tend to separate like the coats of an onion. The photograph, Fig. 3,¹ c, shows the back of the piece as it is now. On the face, Fig. 3, A, the outlines of the animal as engraved in fine

¹ The casts of the piece familiar in museums, and also most of the published reproductions, have been made from a galvanoplastic copy. The illustrations in the text were by the kind permission of the Museum Authorities made from negatives taken specially by the writer from the original by artificial light from the side.



FIG. 3. Engraved drawing of a Mammoth on a piece of Mammoth ivory, in the Museum of Archaeology, Jardin des Plantes, Paris.

lines are faintly discernible in the reproduction, but it will be seen that on the piece, beside the lines of the drawing, there are the cracks where the original has been pieced together and many accidental scratches that have of course to be ignored. Accordingly, since the lines as photographed are too faint to be clearly distinguished in A, a drawing made from this, with constant reference to a very careful delineation executed some years ago by the Abbé Breuil, gives in Fig. 3, B, the lines of the design with the omission of what is extraneous. The high forehead is clearly marked and is carried up to the very top of the piece where this is at its broadest. From this the frontal line is continued downwards by the trunk that can be followed to the very bottom in its natural taper. It should be noted that a round dot that in the full reproduction A looks like the eye, is a natural accident in the ivory, and the real eye is, on the drawing, an eighth of an inch higher but hardly discernible, though the curved lines marking the orbit are quite visible. The strongly curved lines of the tusks are indicated though not drawn out clearly or consistently. The morsel that came out of the nick at the dexter end of the piece carried away a portion of one of the tusks where it curves sharply in towards the forehead, like the tusks in Fig. 2, F. Almost parallel with the trunk and very well defined is the line of the foreleg, the marked inclination of it backwards showing that the creature is represented in motion to the front. Between the trunk and the leg as well as up above at the side of the head, and visible though not so clear along the flank, are the vertical lines that indicated the animal's shaggy fell. One hind leg, the foot of which has been partly broken away, is clear, and the back line of it with the thigh running up towards the root of the tail can be easily followed, and its slope carries out the idea of movement. The tail should be specially noticed. It is cocked up and ends below in a thick bunch of hairs that fills up the space which would otherwise be left vacant above and beyond the rump and the backward

sloping hind leg. The line of the back, which brings us again to the rear of the high forehead where our survey started, is a little uncertain as there seems to be more than one line for it, but the uppermost one is no doubt that which represents the artist's final intention.

This is undoubtedly by far the best portrayal of a Mammoth that palaeolithic art has handed down to us, and there is far more character and more detail than we find in the loosely sketched Mammoths of the Dordogne caves shown in Fig. 2. It is also a great deal earlier than these, and is quite the most notable piece of all those figured in *Reliquiae Aquitanicae*,¹ but for our present purpose its chief value lies in the fact that the build and proportions of the creature portrayed are markedly different from those of the numerous specimens some of which have been shown in Fig. 2. There, where the artist had a practically unbounded space of wall or ceiling on which to display his Mammoth he made him what we have seen, a tall creature with a short back sloping rapidly away down to the haunches. Here, where the field was rigidly circumscribed, the proportions are altered to fit the shape and size of the field, and the outcome is a comparatively long and low animal, while not only is the general form so treated, but the details are distinctly disposed with a view to filling all the spaces. It is so with the high forehead, the curved and fully fledged tail, and the far-sweeping tusks in front. Now this accommodation of a design to the space which was to contain it is artistic composition, in a simple form no doubt, but a form that is the first beginning of great things. It is in fact the establishment of relations, and it is upon relations that the aesthetic effect of works of art largely depends. The meaning of this can be easily explained. The presentation of a single object, whether it be an 'intuition' or mental image in the

¹ This book, published by Lartet and Christy in 1875, was the first important work on the discoveries which have made the second half of the nineteenth century so archaeologically famous. See Chapter II.

artist’s brain, or a copy of something in nature, just by itself as a single thing out of all relations to anything else, is not in strictness a work of art. The catalogue of the yearly exhibitions of the Royal Academy in London used to contain among its printed directions to exhibitors the following, ‘Mere transcripts of objects of natural history and drawings without backgrounds are not admissible.’ It is obvious that a transcript of an object of natural history may be a miracle of imitative skill, whereas a study of some object of natural history, with a background and accessories, may be artistically quite crude and faulty. None the less according to the strict canons of aesthetic philosophy the latter would rank as a work of art, the former, for all its intrinsic merits, only as a work of art in the making. The object with a background and accessories is in relation with these. It occupies a certain defined space within which it may be disposed either in a tasteful or a clumsy fashion, and when we use such adjectives we mean that the eye has envisaged the object critically in connection with the space it has to fill. Furthermore, when there are accessory objects we take these in their relation to the main object and if they seem to form a group with it we are satisfied, while if each one of the objects is only there ‘on its own,’ the effect is an irritating one of incompleteness. It will be seen when we go on in succeeding chapters to survey this pre-historic representative art as a whole that the single object out of all relations is in the main what the artist gives us, though there are beginnings of this establishment of relations among objects which lead on to artistic composition.

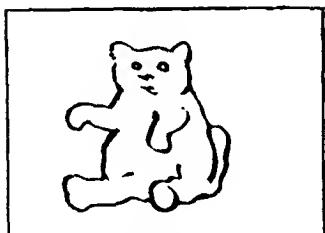
The fact that in the Mammoth drawing just analysed the proportions have been altered to bring the design into relation with the space it was to occupy, is one of these beginnings, and is an artistic phenomenon of the highest interest. Here however an objection may be urged on the ground that the adaptation of a design to the space it fills is a very common phenomenon observable even in the art of children. An

illustration of this may be given. At one time senior students in the Edinburgh College of Art took part in the elementary instruction of children under the Education Authority. An artist friend, who had done his share in this teaching, told the present writer that he gave a class of children of eight or nine years old from the Pleasance district an exercise in drawing a

Teddy-bear. Each child had a sheet of paper of rectangular shape to draw upon, and some put the sheet before them with its long side vertical and others with the long side horizontal, when they began to make their drawings of the model posed for them. The result was that the Teddy-bears drawn on the upright sheets came out tall and slender, while those on the horizontally disposed sheet were short and stout. The illustration, Fig. 4, shows the contrasted effects. Here it must be noticed the child had no previous knowledge or mental image of the object before him and was almost inevitably guided in his representation by the shape of the sheet on which he had to place it. It was the only guidance he had.

Fig. 4. Drawings by children of the same object in spaces of varying proportions.

On the other hand the pre-historic artist must have had in his mind a distinct mental image of the Mammoth in the normal form in which it was always being represented in the caves. His work is so good that he must have drawn Mammoths often enough before, and presumably in the normal shape. Hence it implies a new attitude of mind when he allows the shape of the space available for his drawing to influence so markedly the form and proportions of his model.



Of course quite unconsciously, he must have been subjected to that mysterious inward pressure which makes an artist do this or do that because he is an artist, much after the same fashion, to compare small things with great, as in the animal kingdom the bee forms its hexagonal cell because it is a bee. The principle of relation, a fundamental aesthetic principle, is seen here, perhaps for the first time, in effective operation.

The distinction hinted at on p. 23 between what may be termed 'art in the strict sense' and 'art in the popular sense' finds here an apt illustration. On a superficial view the qualities shown by the artist in his truthful and spirited delineation of his subject are of immeasurably greater interest than the minor detail that the general proportions are accommodated to the shape of the field on which he placed the drawing. Yet mere mechanical accuracy in imitation is not artistic but belongs rather to the domain of science. If the Mammoth drawing had been only truthful in a prosaic sense it would be a 'mere transcript of an object of natural history' (p. 23), but it is a very different thing when the delineation is 'spirited' in the sense that it uses a certain amount of repression here and of emphasis there so as to bring out the character of the model and to present this with a commentary and not as a mere reflected fact. The power of rapid analysis of a complex form and of a new synthesis that gives a clearness and a force beyond what the ordinary eye sees in nature, is certainly the endowment of the artist, but even the manifestation of this power in telling fashion may lack one element without which it is not in the strictest sense art. This is the element of what artists call composition, and means, as explained before (p. 22), the establishment of relations pleasing to the eye and to the intelligence between different objects and different parts of the same objects. These relations are satisfactory if the elements form a complexus more or less diversified but never confused, so that there is always the impression that they form a unity. This makes the general effect one of diversity in unity or

unity in diversity, and this is the effect secured in the formative arts by composition and is really the secret in these of beauty.

This may seem to some readers to be exalting formal qualities in the work of art above those qualities which make more direct appeal to the intelligence and the emotions of mankind. A work of art that presents before our eyes scenes and objects that involve this appeal, that stirs our memories and awakens new trains of thought, must surely contribute more to our aesthetic life than one which only pleases us through the formal arrangement of its parts. Those who feel in this way must however bethink themselves that it is only in the case of the representative arts of sculpture and painting that this intimate personal appeal can be made. It is not necessary moreover for excellence even in these arts that such an appeal should be present, for we should do well to lay to heart a most significant remark made by Sir Joshua Reynolds in one of his Discourses, to the effect that a good picture looks a good picture even if it be upside down. If it have merit of composition in masses, in line, in light and shade, in colour, that is if the proper relations have been established among the various parts held together in the unity of the field, that is enough to secure for the piece artistic rank, quite independent of 'subject.' Furthermore, we are dealing in these chapters not with two only of the arts of form but with art as a whole, and what is said here of the importance of the establishment of relations, or of composition, applies to architecture and decoration and the dance just as much as it applies to the drawings and models of animals which we shall find in the caves. For the purpose of this book accordingly it is essential to emphasize those characteristics in works of art that belong to such works in all their kinds, and not only to the two special forms of art that make a direct appeal to the popular mind. The above is only a brief preliminary statement of principles which will be illustrated in demonstrations and discussions which follow.

CHAPTER II

PRE-HISTORIC MAN

THE book now before the reader originated in a course of lectures at Edinburgh University delivered upon the Munro foundation. This lectureship is in Anthropology and Prehistoric Archaeology, and the present theme is connected with both these studies. Of the two, Anthropology is of by far the larger import. Taken at its face value in the fullest possible sense it means the study of Man in general, including not only his personality and his outward acts but his mental processes and their results, all in fact in which mankind has externalized itself through all the periods of human history and among societies in every part of the world.

It stands to reason that a single science covering all these periods and these vast and numerous fields of study is a practical impossibility, and the real scope of the 'ology' must in effect be far more limited. In practice Anthropology is accordingly taken as meaning the study of man under primitive conditions, at the earlier stages of his slow advance to full human development. The Anthropologist deals with man preferably at the period of 'origins,' when he is making himself in the fullest sense man by long-sustained and patient efforts through millenniums of unrecorded time. On the threshold of what is called 'history' the Anthropologist arrests his steps, for history with its racial complexities, its multitudinous written records, is too vast a field for any single study to cover.

The single study even in this way severely limited is one of a very wide scope, but it becomes more manageable when

the science of Pre-historic Archaeology is brought out and ranged at its side. Pre-historic Archaeology relieves Anthropology to a great extent of the duty of investigating the physical structure of early man, and especially his craniology, together with those of his operations that result in what are known as 'artifacts,' that is, material objects which he has made or fashioned for various purposes and which have survived and come to light in modern times. Following the line of evolution, involving a slow but progressive modification in each generation of previously existing forms, the scientific observer has examined, measured, analysed, compared, these surviving material relics of primitive man, and has investigated the place and conditions of the survival, till with the indispensable aid of geology these reliques are arranged with more or less certainty in a chronological series. The question of absolute dates to be assigned to each successive stage in the evolution is a different matter, and the late Dr Joseph Anderson used to maintain that the archaeologist had nothing to do with absolute dates but only with comparative dates, and this caution must always be borne in mind, even though for the sake of convenience conjectural dates in round numbers may provisionally be assigned to the nearer epochs of the pre-historic past.

According to the view here taken, it will be for the Pre-historic Archaeologist to establish a body of facts based on the evidence offered by material remains, and to hand them over to the Anthropologist who, with his wider survey, will co-relate the material facts with others of an intangible but not less solidly important kind that belong to the world of thought and feeling. In this part of his work, the part which deals not with tangible but with spiritual phenomena, the Anthropologist may receive potent aid from the modern Experimental Psychologist, who, using the inductive method, the method of modern science, seeks by properly conducted experiments to ascertain what does actually go on in the mind

—the phrase is used in a homely popular sense—at certain times and under certain conditions. The aim here is to establish a number of facts that can be scientifically proved about the mind and its operations, and can be co-ordinated so as to form the basis of a philosophy of the spirit, to set by the side of the results of biological science and of physiology. It is the function of Anthropology to carry this work of co-ordination further, and, emphasizing the essential unity of mind and body, to form an image of man as a whole at that stage of his evolution when he has attained to what Herder called ‘Humanität,’ that is, as Wundt expresses it, ‘the complete development of the ethical characteristics which differentiate man from the animals, and their expression in the intercourse of individuals and of peoples.’

The relations of these studies may be made more intelligible if we use the word ‘Science’ for Pre-historic Archaeology and Experimental Psychology, and the word ‘Philosophy’ for Anthropology. There is no opposition here, and the scientist may of course be a philosopher and the philosopher, as was the case with the foremost philosopher of the world, with Aristotle, an adept in science, but all the same the popular conception of the ‘man of science’ is different from that of the metaphysician. The former, taking him quite on the average, is inclined to be impatient of the philosopher, whom he regards as Aristophanes regarded Socrates as ‘up in the clouds’ and ready to answer ‘within and not within’ when asked if he was at home. The scientist claims to stick to facts, and leaves to the metaphysician what he regards as nebulous theorizing. In return the philosophic theorizer is sometimes critical of the ‘man of science’ for the comparative narrow range of his mental operations and interests. On both sides there may be a certain amount of truth, but the two fellow-labourers in the vast fields of fact and of thought are really on the same task, united in spirit though not exactly in method, and if the one prepares the materials the other shows

how these materials come together to fashion our intellectual and moral heritage.

These preliminary considerations may help to explain the method which will be followed in these chapters. On the archaeological side an effort will be made to present as clearly as possible a certain selection of facts that Pre-historic Archaeology has established about primitive man and his operations. These facts, archaeologically established, will, figuratively speaking, be handed over to the Anthropologist for the furtherance of his own special purpose of getting to understand the ideas and mental processes of primitive man.

It is not the facts of pre-historic times merely as they are in themselves that concern us but those facts in relation to the questions about the beginnings of the arts, as to which we must try to satisfy our natural curiosity. The facts are however the necessary basis for any special studies of early artistic phenomena and must be properly examined and illustrated as they are in themselves before we can attempt to draw conclusions from them.

These facts are the outcome of observations and studies that have been actively pursued for about a century past, but in science a century is but a brief period, and the investigation of the facts is quite a thing of our own time, and is progressing rapidly under our own eyes, so that fresh discoveries are constantly being made and new theories advanced. The chart, Fig. 5, gives a general scheme of pre-historic periods with their order, their nomenclature, and suggested approximate dates in round numbers, and may be found useful for reference as we proceed with a brief historical and geographical survey which is a necessary basis for the studies which follow.

The facts that specially concern us are connected with a distinctive period in the remoter but by no means the remotest epochs of man's life upon the earth. It is known as the later or upper palaeolithic period, and extends according to a current system of chronology from about twenty thousand to

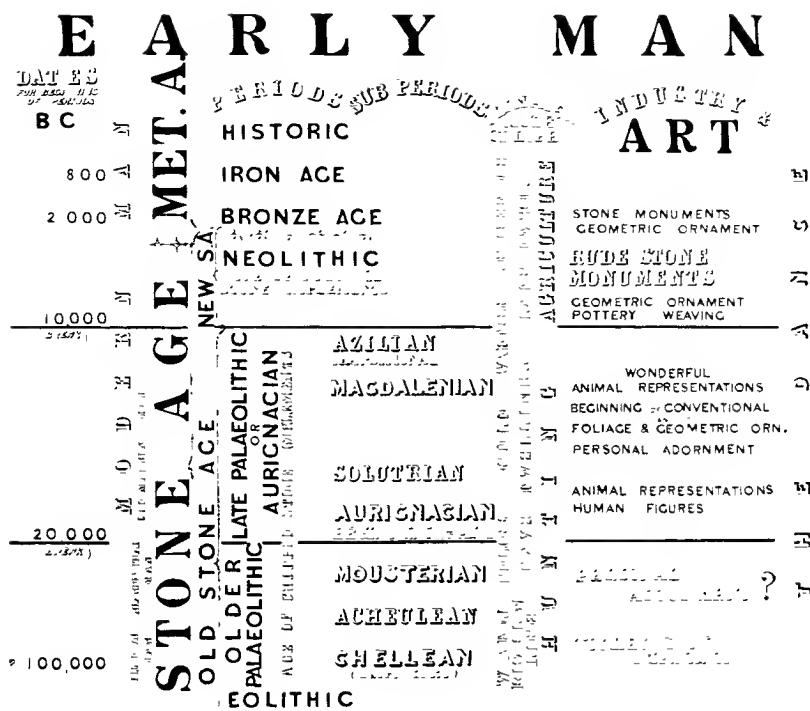


FIG. 5. Chart of Early Man.

about ten thousand years B.C. The date twenty thousand years ago sounds sufficiently remote, but it is comparatively modern when compared with the approximate period when the earthly career of *Homo Sapiens*, or man as an intelligent being, took its start. It is important to note that behind the man of twenty thousand years ago, with whose doings we shall have to concern ourselves, there stretches a long line of ancestors direct or indirect, who through perhaps some thousands of generations had been slowly developing habits and systems of ideas that the men of the time we have to deal with inherited. Religion, or rather magic, for magic in primitive times takes the place of religion, had had time to grow, if not into a system, at any rate into a body of firmly established beliefs. The assurance of a sort of continued

existence after death, and a cult of ancestors associated with such assurance, together with other mystical beliefs and customs, could have obtained firm hold over the minds of men.

These earlier epochs before our own special period begins must necessarily have a word. They are epochs of what is known as geological time the special characteristic of which is the alternation of cold and warm periods. A Canadian scientist, Professor Coleman of Toronto, has lately published what *The Times*¹ has called 'a graphic, succinct, and inspiring account of those wonderful vicissitudes of climate through which the world has passed since the dawn of its geological history—changes which have so profoundly influenced its scenery, and so greatly controlled the development and distribution of its plant and animal, including human, life.' The causes of these changes of climate are not yet fully understood, but the tendency now is to look for them on or in the terrestrial ball itself rather than in the vaster cosmic system that is the domain of the astronomer. Normally, Professor Coleman thinks, there was no area of perpetual ice even at the poles, but he has reckoned four great periods of glaciation within the many millions of years during which time can be more or less measured on the evidence of rocks, and at some of these ice caps covered one or other of the hemispheres even as far down or up as a few degrees from the equator. The latest of these periods of glaciation, called par excellence the 'Great Ice Age,' is the only one that concerns us, for during its incidence man (who may have come upon the scene before it began) passed through very important stages of his early development, that were largely influenced by changes of climate.

The period of extreme glaciation in the Great Ice Age was not however continuous, for there were periods of relaxation or interglacial periods when a temperate or even a hot climate prevailed perhaps for some thousands of years. One of these

¹ Literary Supplement, August 26, 1926.

interglaciations, going back perhaps one or even two hundred thousand years, has yielded to us the first clear evidence of the presence and the activity of man upon the earth. This evidence was first noted and recorded in Belgium and France, and it was made generally known in 1847 by the publication of a book written at Abbeville in Northern France, in which the author, Boucher de Perthes, presented a collection of flint objects which he claimed to have been fashioned for tools or weapons by the hand of man, and for which, on geological grounds, and on the ground of the presence with them of the bones of extinct animals, he claimed a very remote antiquity. This was the first appearance on a scientific platform of fossil man, but not only did the science of the time look askance at him, but the very possibility of his existence was denied by some leading authorities on natural history, such as the celebrated Cuvier. Boucher de Perthes however held his own, and the learned world was before very long converted to a belief in the existence and immense antiquity of fossil man.

Fossil or primeval man, the fashioner and wielder of the rude stone implements, lived at first under warm climatic conditions, and as the remains of him appear in gravel beds that were formed by the action of rivers he seems to have been riparian in his habits, and may have sheltered in huts of boughs and clay, and gained his subsistence by fishing, or by snaring, or in other ways gaining the mastery of animals who came down to the streams to drink. The bones of these creatures he may have used for weapons or implements, and bushes and trees would furnish the material for effective clubs or spears, and all these would be employed to supplement the shaped flints which with one or two exceptions represent all the 'artifacts' or products of human workmanship that have actually come down to us from this remote era. The most important exception is an artifact of some size but of unknown use made out of the thigh bone of some extinct creature of the elephant species that was larger than the Mammoth.

Fig. 6 gives three views of it copied by permission from the *Guide to the Natural History Museum* at South Kensington, where the piece is preserved. It is a flat object about sixteen inches long, somewhat of the proportions of a cricket bat with one end similarly rounded but with the other end, where the handle comes in the bat, worked to a point. Near one edge there was a perforation that has become a notch through the breaking away of its outer wall. Close by this is a mark that has been explained as that of the tooth of a savage animal that had seized the weapon with which it was being attacked. The piece may be contemporary with the Piltdown skull. Another lower palaeolithic artifact, unique of its kind because made of wood, is a pointed shaft of that material, no doubt the end of a spear, that was found at Clacton-on-Sea in Essex in a bed that is at latest of Early Mousterian date, and is in the collection of Mr S. Hazzledine Warren, of Loughton, who has kindly allowed the reproduction of the slight sketch of the piece, made from a photograph, on the dexter side of Fig. 6. It is about fifteen inches long, and is the oldest worked implement of wood that has yet been found.

There must not be passed over in silence discoveries that have been made from time to time in Chelian or Acheulian surroundings of small objects, fossils, shells, and pebbles or small discs of stone, each pierced with a hole which might serve for suspension. The perforations, it is generally acknowledged, are natural and not made by man, but some archaeologists think that some of the holes have been enlarged by human agency. They were claimed as artifacts in a paper by Dr Ballet of Paris, published in the *Bulletin de la Société Préhistorique Française*, vol. xii, in which a number are illustrated. Professor Macalister accepts them, but, as is the case with the eoliths, others as strenuously deny that they are human products and the Abbé Breuil takes this view. Still, though not made by man, they may have been worn by him as a primitive form of personal decoration. In the

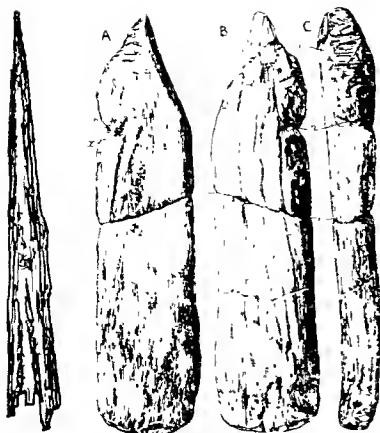


FIG. 6. A, B, C, three views of Lower Palaeolithic Bone implement from Piltdown, Sussex.

On dexter side, Wooden Spear Point, Lower Palaeolithic, from Clacton, Essex.



FIG. 7. Early Flint Implement found in 1690 near Gray's Inn Lane, London.

Museum at St-Germain there is an exhibit of a set of fifty small fossils, naturally perforated, found in the lower stratum of an Acheulian deposit, that, as the Museum label suggests, 'may have served for a necklace.'

As millennium followed millennium the climate became gradually colder, and a glacial period supervened and was the cause of an important change in the manner of life of men. The river banks or open alluvial plains were exchanged as places of habitation for caves or rock shelters which in certain regions Nature provides in some abundance. The epoch when caves were first appropriated by man was the last sub-period of the immensely long primeval age of warm riparian life that used to be called the 'Drift' period, from the river drifts of gravel in which the evidence of man's existence has been preserved.

This brings us to the question of the nomenclature of these various periods into which the vastly extended pre-

historic age is broken up. The nature of the artifacts by which man's existence and activity are attested give the name to it of 'Stone Age,' or using the Greek word for stone, the Lithic age. This lithic age, before the introduction of metals, extends from an immeasurable antiquity to about two thousand before Christ, and falls into two main periods, the old stone or 'palaeolithic' age, and the new stone or 'neolithic' age, the line of division being drawn somewhere about ten thousand years before our era. It is only with the old stone age that we are concerned. This is subdivided into two about at the epoch when the caves were first inhabited, and the earlier and far the longer period is called 'early' or 'lower' palaeolithic, the other 'late' or 'upper' palaeolithic, the alternative adjectives being derived from stratification. When there is a series of layers successively deposited the lowest will under normal conditions be the earliest and so on. It is the late or upper palaeolithic period that will furnish us with our material, for it is from this period that we derive our earliest direct evidence of the origins and the first stages of development of the arts.

'Lithic,' 'Palaeolithic,' 'Neolithic,' 'Lower Palaeolithic,' 'Upper Palaeolithic,' are all words formed from the material chiefly in use at the times in question. Another system of nomenclature is topographical, and the names of sub-periods are derived from places where were discovered objects specially characteristic of the particular stage of culture at which man in each of these sub-periods had arrived. The so-called early 'drift' period is generally called the 'Chelles' period, from a place, famous in Early Christian times, on the river Marne about eight miles from Paris, though in honour to Boucher de Perthes it might well have been named after Abbeville. When the climate was beginning to get colder, a sub-period is named Acheulian from a place Saint-Acheul on the Somme near Amiens, and that when cave dwelling began, Mousterian, from a rock shelter called Le Moustier on the Vézère in the

Dordogne district of Western France. This fact is a reminder that all these local names are French, and this is because fossil man is a French creation, born and brought up under Gallic skies, and nurtured by able and devoted votaries into a personality that makes him one of the most interesting representatives of the human race at large. In the study of prehistoric humanity it is universally acknowledged that for two generations past French scholars have taken the lead, and it is mainly from France that the examples we shall have to use will be drawn. It may at the same time be noticed that in connection with the newest discoveries and theories about palaeolithic man, that seem to point to a far greater antiquity in his culture than has been generally accepted, English sites especially in East Anglia are assuming a new prominence, and workers in that region such as Mr Reid Moir and the Prehistoric Society of East Anglia are preparing surprises for the learned world.¹ As things stand now it is places in France that have given their names to all the successive sub-periods which follow on the just-mentioned Mousterian. This comes as we have seen at the division between the lower or older palaeolithic and the upper or later palaeolithic, and is even reckoned a sub-period of its own, entitled 'Middle Palaeolithic.' This division is of the utmost importance, for the newer age is markedly different from that which went before. A fresh and a greatly superior race now makes its appearance and the older race of Mousterian times appears to have died out. The products of human industry take new forms and employ new materials and processes, and in every way an advance is made towards what we may call civilization.

Though human industry, as has just been said, takes new forms, yet the staple product still remains the flint implement. This however has already assumed many varied forms corre-

¹ See *The Antiquity of Man in East Anglia*, by J. Reid Moir, Cambridge, 1927.

sponding to an ever-increasing number of purposes which these implements had to serve, as well as to different technical methods of fabrication. The successive sub-periods, some of which have already been named while others remain to be enumerated, can be distinguished by the forms which in each case the stone artifact was made to assume. There are Chelles forms and, as must now be said, pre-Chelles forms, comparatively rude though in their way effective. The earliest implements or weapons were not hafted but held in the hand and were designed to increase the efficiency of the hand or fist. The French name for the artifact is '*coup de poing*', very commonly translated into English by '*hand-axe*'.' This is not a good rendering, for an axe suggests a shape designed for cutting and a handle, whereas these primitive implements were grasped by the butt end, often specially shaped to facilitate this, while the other end might be more or less pointed. This is the case at any rate with the most interesting single piece of the kind known, a worked flint which in company with an elephant's tooth was dug up near Gray's Inn Lane, London, in 1690, and is shown in Fig. 7. It is now in the British Museum. Its significance was at the time of course not recognized. Professor Osborn suggests the name '*hand-stone*' for the '*coup de poing*', but perhaps '*fist-flint*' might have more point, and is like the German '*Faustkeil*'. From the earliest fist-flint onwards, for a number of millenniums at which we can only guess, this flint industry flourished, and though we are not concerned with its history there are questions connected with it that come within the scope of the present discussion. If the Chelles implements are comparatively rude when measured against what was to follow them, they were certainly not the earliest products of the industry, for in the background there loom the far cruder '*eoliths*' that are now assuming a definite shape and substance, and again the simplest Chelles piece is far in advance of the stone implements used by the more backward of the modern

savages. The flints however of the next succeeding sub-period, called from St-Acheul, represent a distinct advance and sometimes attain to marked elegance of form and a large measure of precision in the technical treatment of surface. The most attractive forms of the St-Acheul flint are disc-shaped implements comparatively thin and flat, sometimes triangular in plan and sometimes oval or almond shaped or finally long and narrow with a resemblance to a sharpened lance point. The thinness and the even surface are secured by splitting off through pressure deftly exerted from the edge inwards thin sherd of the material each sherd or flake coming half way across the width of the blade, so that when the process has been repeated along the other edge the two rows of shallow depressions where the flakes have come away meet in the central axis of the piece and constitute there a median ridge, where the blade will be thickest and on each side of which there will be an even slope on both sides to the edges. This median ridge may sometimes be made to stand out as a pronounced central rib. There is very good work of the kind in late St-Acheul times, but perfection in this department was reached later on in the Solutrian epoch, when laurel-leaf shaped blades and cunningly fashioned javelin points¹ exhibit a more pronounced refinement in forms and a most accomplished technique.

The resultant products still of course remained what the first Chelles or pre-Chelles 'coups de poing' had been—objects evolved to suit certain practical purposes and conditioned by the nature of the material and the processes by which it was manipulated. That there was something more in them than this may however be argued from the fact that the history of the flint-craft shows changes from age to age that are more than the natural stages in a progressive development. After the great advance in elegance of the St-Acheul forms over the

¹ These javelin heads are called by Prof. Macalister, p. 376, 'by far the finest specimens of flint-flaking which the whole Palaeolithic period has to show.'

cruder Chelian, we do not find a similar advance in the next or Mousterian period but rather on the whole a decline. Then comes the Aurignacian epoch, in which art in one form makes a meteoric entry ; this art is not however displayed in the treatment of flint implements but in the quite different field of animal delineation. The flint industry again gets its turn with the appearance of the remarkable phase of culture called Solutrian, to be explained later on (p. 53), and the Solutrian people have little or no feeling for the representative side of art but exhibit a sense of form and even of grace combined with extraordinary technical skill that puts their achievements in this industry almost at the head of all known work of the kind.

The fact that one particular form of craftsmanship appealed to certain races, while other previous or succeeding groups of primitive men took comparatively little interest in it but devoted themselves enthusiastically to other branches of production, is a proof that art was at the time in a sense 'in the air,' for such interest in one kind of work rather than another is an artistic trait, and craftsmen who have felt, or rather unconsciously followed, these inherent preferences will certainly go on to exhibit a spirit of emulation which spurs on the individual to attempt something technically more perfect than his fellows have achieved, or something more pleasing in the eyes of others. It does not matter from the present point of view that the object on which this attention is concentrated is only a thing of use. It is an old doctrine in aesthetics, firmly established as a sort of axiom, that an object or an activity the end and aim of which is mainly utilitarian cannot be artistic, while the artistic act or product is for itself alone and excludes any utilitarian element. This doctrine will be fully discussed in a later chapter of this book and we shall find reasons for subjecting it to very considerable modifications. It is sufficient here to say that the fact that these flint implements were always essentially things of use

does not preclude the possibility of some of them being at the same time works of art. This thesis has been recently examined and with natural reservations accepted by the Abbé Henri Breuil,¹ who holds his exceptional position in relation to these studies through the fact that he unites the qualities of an accomplished man of science with those of an aesthetic philosopher and of a practical artist of extraordinary insight and skill. The objects with which palaeolithic studies bring us into contact are by the Abbé scrutinized under the dry light of science and in complete detachment from any considerations but those of exactitude and truth, yet at the same time these same objects are delighted in from another side for their human interest and for their aesthetic qualities, which are exploited with real interest and enthusiasm.

In the first of the articles noticed below, while acknowledging that figurative art only begins in the Aurignacian period, the Abbé finds that in the Chelles and St-Acheul epochs 'there is manifested a certain artistic sentiment in the regularity and the proportions of the best of the implements ; we recognize that this sentiment is a proof of a fundamental aptitude for making a work of art, but we cannot affirm that the beauty of a work had yet come to be realized independently of its practical utility.' Good craftsmanship always, he thinks, results in a certain beauty, but the worker is not himself conscious of this. In regard to that, a comparison between the surface flaking on flat Acheulian flints and that on the Solutrian specimens forces on us the impression that the improvement in regularity is something deliberate and cannot have come about without a certain intention which implies a subsequent pride in realization of success when the intention has been carried out. The same applies to the progressive refinement of the outline and proportions of the

¹ In two papers in the *Journal de Psychologie* for 1925 and 1926, the first entitled 'Les Origines de l'Art,' the second, 'Les Origines de l'Art Décoratif.'

implement. A flat surface could be secured by flaking without that correspondence between the shallow hollows on each side of a median line, and a point might pierce equally well whether or not the sides of the tapering javelin head approached each other in delicate and well-balanced curves. The doubt which is at times expressed in archaeological works as to whether these often really lovely things can be called works of art, is due in great part to the old obsession already referred to according to which a rigid line of demarcation must be drawn between objects of use and objects which are beautiful but have no utilitarian functions, but we have seen already that this doctrine needs reconsideration. It is noteworthy that, in the second of the two articles referred to, the Abbé Breuil credits the craftsman who has turned out an object of use, the proportions of which are harmonious while the technical details and markings are symmetrically disposed, with an appreciation of the aesthetic aspect of what he has done, or to quote his own words, 'C'est ainsi que dans la hache taillée des industries anciennes du Paléolithique, dans la feuille de laurier solutréenne, dans la pointe de flèche néolithique, l'homme qui les a fabriquées a déjà fait, non seulement une œuvre d'art au sens industriel, mais une œuvre d'art, perçue comme telle, ayant des qualités esthétiques reconnues et voulues par lui.'¹

There need be accordingly no reluctance in principle to apply the term 'a work of art' to some of these palaeolithic products, or to those that succeeded them in the neolithic age, or to those again that represent the extension of the flint industry into the age of metal, as in the case of the Egyptian flint knives, generally reckoned the masterpieces of the lithic industry as a whole.² There must however be said of these

¹ *Journal de Psychologie*, Paris, Alcan, xxiii Année, 1926, p. 364.

² Late Scandinavian examples in which the flint is laboriously fashioned in imitation of weapons of bronze are wonders of technique but are not genuine products of the traditional lithic industry.

pieces what will have to be said of other artistic products that will come before us—they are works of art at a stage of development short of that at which the full nature of art is unfolded. In decoration, in the dance, in the representative arts, and also we must add in architecture, there is a stage in which though genuine artistic qualities are present in a particular product yet it can only be considered a work of art in the making. An illustration will present itself if we compare for a moment a very small object with one immeasurably great—a Solutrian javelin point with the Great Pyramid. As a whole each has artistic quality, the one in its delicacy and the just distribution of its lines which give it beauty, the other in its stupendous mass and its suggestion of mystery through which it produces the powerful aesthetic impression of the Sublime. Each moreover has in its own way extraordinary technical perfection, the flint piece in its spare and delicate proportions and in the regularity and symmetrical precision of its flaking, a regularity and precision that are not mechanical for the facettes of the flaking are necessarily a little varied in their forms and sizes ; the great stone monument in the accurate jointing of the masonry of its coating, an accuracy which on the vast scale of the structure must necessarily be mechanically true for variety and ‘play’ would be alien to the monumental dignity of the mass. Yet if we put the question, Is the Great Pyramid architecture? we are constrained to admit that it fails to satisfy the essential canons of this art. It is too simple in its form and offers no divisions or minor masses within the majestic unity such as the architect requires for his composition. The aesthetic effect of an architectural monument depends more than anything else on the harmonious proportioning of the parts to each other and to the whole, and for this the single mass offers no opportunity. The single object is in itself stupendous but it is out of all relations, as we shall see is the case with the animals of Aurignacian art.

As regards the worked flints there are abundant representations of those of the St-Acheul, Solutré, and other types, in the *Musée Préhistorique de Mortillet*, and many of these are reproduced in the archaeological works of the day. It will be sufficient here to take one example only from a set of so-called lance-heads of Solutré character that are of special interest. The piece is given in Fig. 8. The French call this form 'feuille de laurier,' or where the blade is narrower 'feuille de saule,' from the resemblance of its shape to that of the laurel or willow leaf, but the outline is really made up by two isosceles triangles with slightly curved sides joined at their bases, one triangle being much higher than the other. The edges are made sharp by the flaking process already described, and the points of both triangles are in our specimen exquisite. This is in the British Museum though at present in the basement, and is one of a set of fourteen similar pieces found together in a sort of cache at a small place called Volgu, in the Commune of Rigny, Saône-et-Loire, France, and M. Déchelette says of them, 'Ces magnifiques pointes, objets votifs, ou pièces d'apparat, trop fragiles et trop précieuses pour servir d'outils, composaient une véritable cachette. On les trouva réunies en paquet, au nombre de quatorze.' . . .¹ The photograph gives the two sides of the specimen. The idea that the pieces were votive is of course only a conjecture, but their character seems to show that they were made with a special view to appearance, that is to grace of form and delicacy of surface manipulation rather than to serviceability as weapons. The blade is just under a foot in length ($11\frac{3}{16}$ inches) with an extreme width of 66 millimetres or $2\frac{9}{16}$ inches. The thickness over this extended surface is never more than 8 millimetres or about $\frac{1}{16}$ of an inch. To cut a piece so large and thin out of a substance which though tough is quite breakable, and to manipulate it even to the qualified perfection in technique of its flaking demanded extraordinary care and

¹ *Archéologie Préhistorique*, Paris, Picard, 1908, p. 147.



FIG. 8. Solutrian Lance-head (?) of Flint, from the Volgu find. In the British Museum.

skill, while the flaking is sufficiently regular to look thoroughly workmanlike but not mechanically even. It appeals as form and surface quality to the eye even more than it appeals to the intelligence as adapted for service, and we can hardly avoid crediting the craftsman with an artistic consciousness as he elaborated the design and execution.

In criticizing the piece as a whole one is checked by the fact that the manner of its helving and its use are largely matters of conjecture. One would say that the lower triangle is the part inserted and bound into the notch or groove at the top of a wooden shaft, but for this the shape and treatment of the part is obviously unsuitable. If it were to serve as a tang it would not need a point but a flat base to prevent the blade being driven unduly into the wood, and the sharp edges of the side would cut the fibres with which presumably it would be spliced. Is it possible that this second triangle, which be it observed does not only occur in show pieces but in others obviously meant for use, is really influenced by artistic feeling, making the piece more of a unity and giving

an opportunity for simple artistic composition by the contrast of its form with that of the upper triangle? At any rate we may see in the piece an intention that is artistic as well as utilitarian and take it and its fellows over the line on to the artistic side, though it may at the best only be art in the making, art rather in the general popular sense than art according to strict scientific aesthetics.

The cold, and at times and places sub-glacial, conditions of climate, which drove Mousterian man to a cave life, continued after his disappearance and his supersession by the distinct and superior race, called sometimes the Cro-Magnon race and sometimes the Aurignacian. These terms derived from places carry with them no significance, unless these places be localized and have some individuality imparted to them by descriptions and illustrations. A few sentences will be well spent over each, in order to give those in whose ears they sound a little strange some sort of personal hold upon them. The actual spots of antiquarian importance are in each case near some village or mansion or some natural feature, from which they take their names. The geography of the subject is comparatively simple. Most of the sites belong to groups of which there are three important ones all in the region which has become classic ground for the prehistoric student, but there are also outlying sites some of which deserve special attention. The 'classical region' as shown on the Map, Fig. 9, facing (p. 47), includes the Southern portion of Western France from about Limoges to the Pyrenees, and then following this chain of mountains in their prolongation to the North and West it extends into Northern Spain and especially into the Province of Santander. The three groups comprise, first, this Spanish one; then a group on the French side of the Pyrenees with its centre perhaps at Foix; and lastly the large and important group in the Dordogne on the river Vézère and its tributaries,

NAMES & LOCATION OF
PRINCIPAL CAVES
of present interest.

| DISTRICTS | PAINTED CAVES | TOWNS |
|-----------------|-------------------|-----------------|
| Northern Spain | | |
| | ALTAMIRA | Santander |
| | CASTILLO | " |
| | LA PASIEGA | " |
| | HORNOS DE LA PEÑA | " |
| | PINDAL | " |
| | COVALANAS | Ramales |
| French Pyrenees | | |
| | NIAUX | Foix |
| | PORTEL | " |
| | MAS D'AZIL | " |
| | TROIS FRÈRES | St.Girons |
| | TUC D'AUDOUBERT | " |
| | MARSOULAS | Salies de Salat |
| | GARGAS | Montrejeau |
| Lot | CABRERETS | Cahors |
| Dordogne | LA MOUTHE | Les Eyzies |
| | COMBARELLES | " |
| | FONT DE GAUME | " |
| | LA GRÈZE | " |
| | CAP BLANC | " |
| | TEYJAT | Angoulême |
| Riviera | GRIMALDI | Meuton |

PRINCIPAL GROUPS OF PAINTED CAVES
AND OTHER PALAEOLITHIC SITES
in France and Northern Spain

0 10 20 30 40 50 English Miles 100

A special map of the Les Eyzies district in the Dordogne is given in Fig. 10.

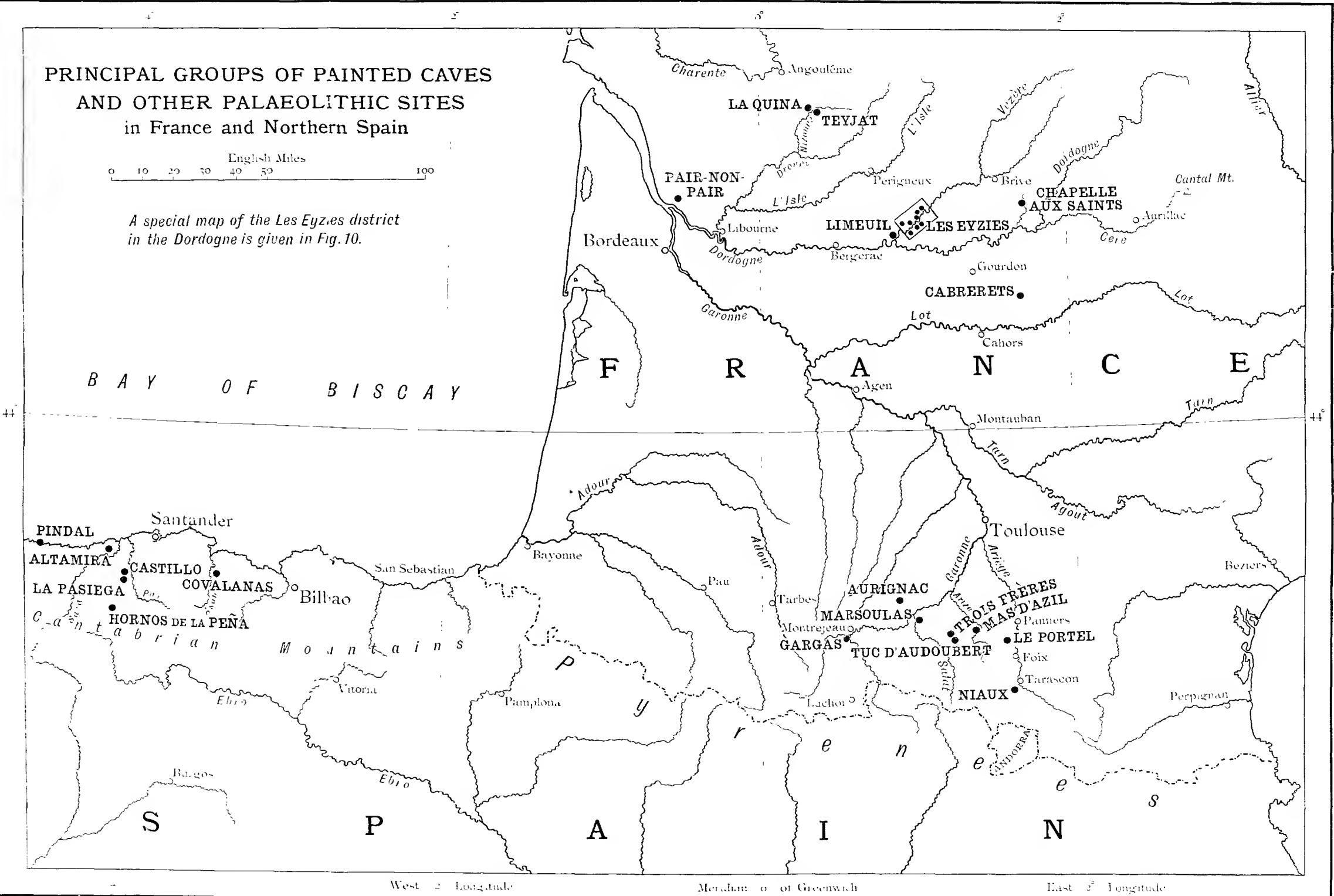


FIG. 9 To face p. 47. Based by kind permission on the Map at the end of Professor Osborn's *Men of the Old Stone Age*, Charles Scribner's Sons, New York, U.S.A.

centering at the attractive little place of sojourn Les Eyzies. The chief outlying site, beyond the limits of the Map to the East, is not actually in France but in Italy, but is so close to Mentone that it has taken this name. Upper palaeolithic sites in Italy itself hardly exist, but there are some in Switzerland and Austria and even beyond these eastwards, while Moravia has furnished the important site of Předmost, notable for human remains found in conjunction with an enormous mass of the bones of Mammoths. In Northern France, Belgium, and Southern England this palaeolithic culture is represented, but till quite recently Scotland and Scandinavia have been reckoned blank areas. It is now coming to be recognized however that these regions were not wholly and continuously under glaciation but that interglacial periods of a milder climate allowed this phase of palaeolithic culture to extend further to the North than used to be considered possible.

These sites are in the great majority of cases in limestone regions, and limestone, as one knows it in Derbyshire, Somerset, and other parts, is often honeycombed with water-worn channels and caves. It does not follow because we call the later palaeolithic people cave dwellers that all the population of Central and Western Europe found these convenient refuges open to them, and there is some evidence that many lived in constructed huts in the open. In the open however the remains attesting the former presence of a palaeolithic population had little chance of surviving, whereas cavern conditions would obviously favour preservation. Hence it is to the caves that we look for the evidence on which to base our judgement upon primitive man at this epoch and his works, but to the caves proper must be added the quasi-caves known as 'rock shelters.' These are specially well represented in typical forms in the Dordogne district of which a special map, taken by kind permission of Professor Henry Osborn from his work *Men of the Old Stone Age*,¹ is given as Fig. 10. In

¹ Third edition, London, 1926.

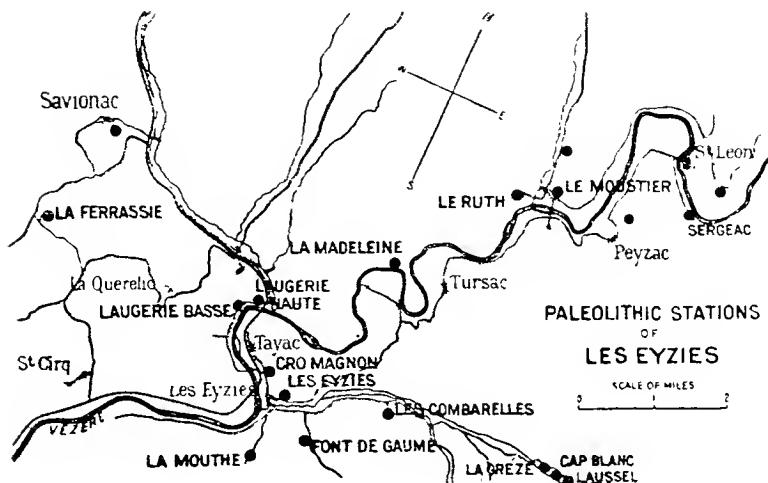


FIG. 10. Map of the Dordogne district of Western France. From Osborn.

this region we may see long stretches of limestone cliff bounding river valleys like that of the Derwent at Matlock. Along the Vézère however there is this peculiarity that the upper strata appear to be of harder rock than those lower down and these latter have been extensively worn away by water and by weather so as to form long hollows in shape like a tunnel vertically bisected, the more solid stratum above forming the roof.¹ A magnificent specimen of the Dordogne rock shelter is that at Laussel shown in Fig. 11. Another, at La Ferrassie, Fig. 12, is by no means imposing in aspect, but revealed under the careful exploration of M. Peyrony archaeological treasures of great interest.

Le Moustier, with which we may begin a brief survey of the sites that have given their names to periods, is a rock shelter of this kind, on the right bank of the Vézère and about a hundred feet above it. There are two levels, an upper and

¹ This variation in the resisting power of superimposed limestone strata is well illustrated by the famous Egyptian Sphinx. The head has been carved out of limestone rock of good hard quality and it has weathered extraordinarily well, whereas the lower parts of the colossal effigy have in most parts weathered away to nothing, and were even in ancient Egyptian days made up with masonry.



FIG. 11. Rock Shelter at Laussel, Dordogne district.



FIG. 12. La Ferrassie.



FIG. 13. Le Moustier.



FIG. 14. Cro-Magnon.

FIG. 15. Laugerie Basse and
Laugerie Haute.

a lower, the latter of which furnished a fairly complete skeleton of the man of the period, that it is interesting to compare with the skeletons that represent the newer race which as we have seen superseded the Mousterian at the opening of the upper or later palaeolithic period. The upper level at Le Moustier, Fig. 13, furnished a collection of the artifacts that characterize the epoch, and at this day the flat terrace in front of the shelter when turned up by the plough shows the earth powdered with worked flints of the period in different forms.

The new race already spoken of revealed its presence for the first time in 1822, and somewhat surprisingly on a British site, the cave of Paviland on the coast of Gower in South Wales, but in 1852 important discoveries were accidentally

made at an unimposing rock shelter near a small village called Aurignac, just at the beginning of the rise of the foot hills of the Pyrenees half way between Pau and Carcassonne, and the little place has obtained the honour of giving its name to the first great sub-period of the later palaeolithic. There is nothing there now to be seen except the site, but it is still made a place of antiquarian pilgrimage. Seventeen skeletons of the new race were here disinterred but they were lost to science, and the characteristics of the new race came prominently into evidence when some skeletons were found in 1868 at a place on the Vézère called by the curious name Cro-Magnon. It has now quite lost its original character and is close to the little railway station of Les Eyzies, but the small rock shelters still remain in the grounds of a modern house, Fig. 14. Here an enormous racial advance was at once evident, for the Cro-Magnon man has been called one of the finest representatives of the human race, with a stature of about six feet and a brain capacity fully equal to that of the average modern. A woman's skull was remarkable from the fact that it had been pierced by a clean cut from a flint axe or spear head that had caused her death, Fig. 16. She was with child at the time, and the occurrence may be held to cast a sinister light upon Aurignacian family life. The woman's skeleton was however one of four, and all the bodies were lying on the top of the cave débris and had evidently not been buried with any of the customary adjuncts or rites, so that as Professor Macalister remarks 'it is not improbable that the people to whom the skeletons had belonged had been murdered and left where they lay.'¹ If this had been the case the presence of the head-wound would give no colour at all to the silly popular notion that the typical cave man was always knocking his womenkind about with a big club, and it has been pointed out that the evidence of interments seems to indicate consideration for women and some tenderness of

¹ *Text Book*, p. 349.



FIG. 16. Skull of Cro-Magnon woman showing fracture of the bone.



FIG. 17. Bones pierced by flint or quartzite points.

feeling, especially in the care for children.¹ The incident is only noticed here because it proves the efficiency of the flint weapons of the time. The cut is quite clean and the bone is not bruised nor shattered. How penetrating might be a missile of this material may be seen from two examples in the Museum of Natural History at Toulouse in which vertebrae have been pierced by a flint or quartzite arrow or lance head. One vertebra is that of a Stag, Fig. 17 the lower piece, and the flinty point is deeply buried in it, but the upper is human and there is about it the astonishing fact that the quartzite point is embedded not in the exterior surface of the bone but in the part of it turned inwards, so that the missile must have passed through the whole thickness of the trunk with all its internal organs from front to back, and yet have retained enough momentum to bury itself in the spinal column. It has been often noticed how small and weak seem to be the palaeolithic weapons and implements, such as the assegai heads or the throwing-sticks, when compared with the vast bulk of a Mammoth or a Rhinoceros, but what has

¹ Obermaier, *L'Homme Fst.*, p. 136, and the present volume (p. 173).

just been said shows that some of the hunters of the stone age could propel a missile with extraordinary force and power of penetration.

The Aurignacian sub-period was succeeded after an interval by that known as Magdalenian, and the cultures of the two are so remarkably similar that one would reckon them as continuous, but as a fact they are in point of time separated by a long period of culture markedly different from both and known as Solutrian. This culture appears intrusive, an interruption of the continuity which would otherwise exist between the Aurignacian and the Magdalenian phases. The Solutrians derive their name from the station of Solutré near Mâcon in Burgundy, which is neither a cave nor a rock shelter but a comparatively open site where a fairly large population supported itself mainly by hunting the Wild Horse for food. On the site bones of some hundred thousand Horses have been found. In their culture they were specially devoted to the manufacture of flint weapons and implements in which, as we have seen, they were carrying on the traditions of the far older people of St-Acheul. We have seen in the Solutrian flint work an elegance of form and precision in detail which, if the considerations on (p. 40 f.) carry weight, entitle it to claim artistic rank. The ethnology and the history of the people are obscure, and it has been suggested that they forced themselves into Western Europe as intruders and for a time drove out the Aurignacian or Cro-Magnon race, but that after a period of Solutrian predominance the Aurignacians reasserted themselves and came back to their ancient seats and occupations with the new name of Magdalenians.

This name is derived from one of the most famous of all the palaeolithic sites in Western France, the rock shelter of La Madeleine on the Vézère a few miles north of Les Eyzies. La Madeleine, the name must come from some old religious establishment, is close to the Vézère and the floor of the rock shelter is almost on the river level, so that when the stream is



FIG. 18. La Madeleine, general view of the Rock Shelter. From Osborn.

high the site is under water and inaccessible. There is evidence, writes Professor Osborn, that 'the river floods which from time to time occur here also occasionally drove out the flint workers in Magdalenian times.'¹ The view, Fig. 18, the reproduction of which Professor Osborn has kindly allowed, shows the general aspect of the site. The striking work of art in the form of a drawing of a Mammoth we have already had before us calls attention to the fact that Magdalenian industry was largely concerned not with the manipulation of the traditional material flint, but of the materials horn and bone, from which weapons and implements of various kinds from clubs to needles were cunningly fabricated. It is of course not with these objects in themselves that we are concerned so much as with the striking and sometimes attractive ornamentation applied to so many of them. This ornamentation will form the subject of subsequent study and needs only to be mentioned here.

¹ *Men of the Old Stone Age*, p. 384.

Of all the sites where this art on mobile objects is represented, the most productive is in all probability Laugerie Basse on the Vézère. This is a rock shelter not a cave, and it is associated with the neighbouring site of Laugerie Haute, the adjectives 'Low' and 'High' referring not to differences of elevation but to positions down or up the stream that flows by them both. They are seen together in Fig. 15, the nearer, on the dexter side, being Laugerie Basse.

The Magdalenian was a long and extremely prolific sub-period, divided by some writers into lower, middle, and upper Magdalenian, by others into six divisions, and represents on the one hand the culmination of this phase of culture called upper or later palaeolithic, and also on the other hand the first stages of a decline that went on until the whole phase of culture came to an end, and a fresh start was made with the new great period known as Neolithic. There is a break of continuity here between palaeolithic and neolithic similar to that between the early palaeolithic and the later palaeolithic, *i.e.*, between Mousterian and Aurignacian. The period that really concerns us in these chapters is that between the first Aurignacian and the latest Magdalenian, or as it is called by a special name Azilian, which is given a distinctive place as a transitional phase between the cultures of the Old and the New stone ages.

The term 'Azilian' is derived from the most striking of all the natural features that clothe in picturesque beauty these historical sites, the great cavern or rather natural tunnel of Mas d'Azil, about fifteen miles north-west from Foix, Fig. 19. Here the river Arize, quite a considerable stream, has forced its way for more than a quarter of a mile through a lofty ridge of limestone rock, and by its side now runs one of the great French high-roads. The roof of the grand natural vault is of a firm limestone stratum and gives no impression of the risk of a fall, while the sides, of a softer rock, are honey-combed with a number of caverns and grottos that were the

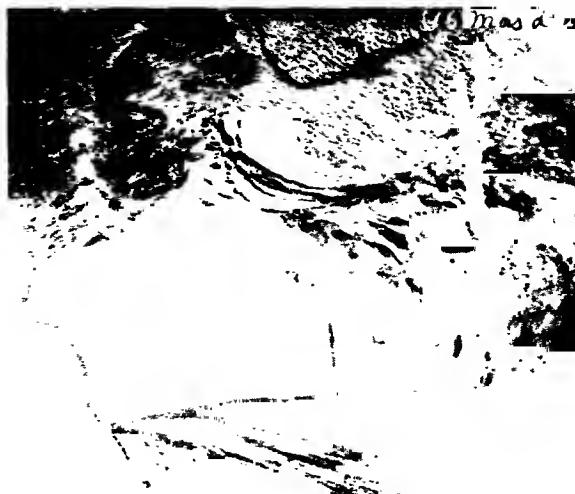


FIG. 19. Mas d'Azil, the natural Rock Tunnel, looking towards the northern entrance.

habitation of men at different periods of the later palaeolithic age. The most characteristic products of the industries carried on in these retreats were of a late date in the period, and it is on the strength of these that Azilian is taken to mean the latest phase of upper palaeolithic. The objects in question are smooth pebbles on which are painted in red pigment round dots or lines, or simple linear devices among which the cross sometimes figures. They have special interest for readers in Scotland in that in some of the Western Isles and even nearer home, similar objects have in comparatively recent times come to light. There is therefore a Scottish Azilian as well as the Azilian of France and Spain.¹ The ornamental features referred to are reproduced in a well-illustrated article by M. Piette in *L'Anthropologie*² from which are taken some specimens which are shown, though without colour, in Fig. 20.

¹ See a paper by the Abbé Breuil read at the Pre-historic Congress at Geneva in 1912, on 'Les subdivisions du paléolithique supérieur et leur signification', *Compte Rendu*, p. 233.

² Supplément au numéro 4, 1896.

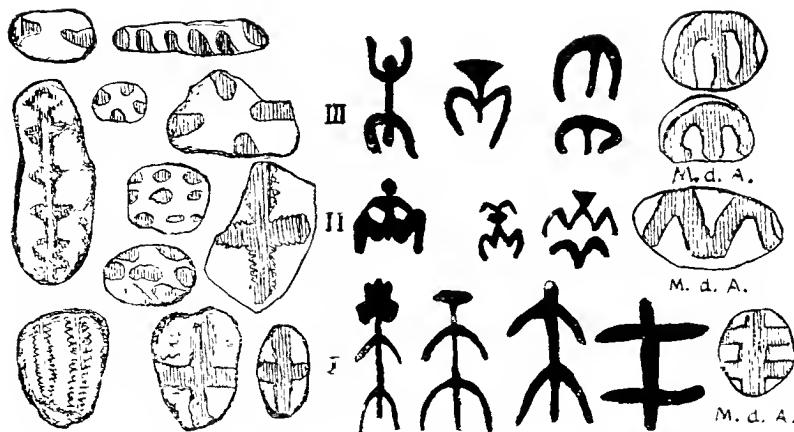


FIG. 25. Painted Pebbles from
Mas d'Azil.

FIG. 21. Degradation of natural forms to
the marks on Azilian Pebbles.

The question What is the meaning of these dots and devices cannot be answered without some reference to the later history of this Magdalenian representative art.

The animals on the famous ceiling or 'plafond' at Altamira are late Magdalenian and represent the furthest stage of advance made in this phase of palaeolithic art. After this however there ensued a very rapid degeneration in the artistic quality of the work, and the finished delineations became first lifeless and conventional and were then broken up and dismembered till a part of the animal was allowed to stand for the whole, and even this part lost its resemblance to life and became a mere symbol, like the letter of an alphabet that had once been a complete picture of some object in nature. The theory of the Abbé Breuil, Catedrático Obermaier of Madrid, and other authorities, is that this sort of degeneration was carried so far as to issue in the meaningless dots, lines, and figures found on the Azilian pebbles. This theory would be very hard of acceptance but finds support in the existence of what seems a parallel process of the degradation of picture into symbol in the case of another special form of mural painting of pre-historic date, represented in numerous rock

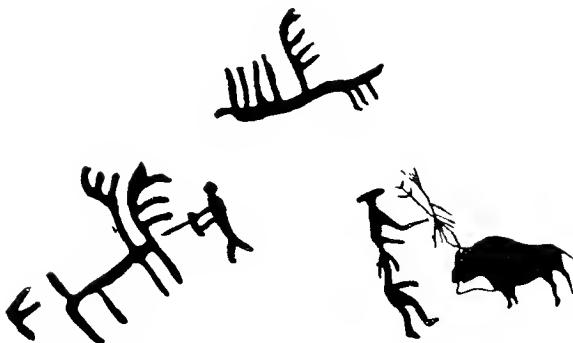


FIG. 22. Degradation as illustrated from Rock Paintings in Eastern Spain.

shelters of Southern and Eastern Spain. Nothing has been said yet of this form of parietal art, which is now being actively discussed under the name of 'Capsian' art, because it will be instructive later on to compare it with the Aurignacian art which is our primary interest. In the Capsian art of Eastern Spain the human figure is freely used on a small scale and in a great variety of positions and actions, and it has been lately urged that these figures have degenerated till they are ultimately reduced to symbols like the marks on the Azilian pebbles. It is argued that a similar process has gone on in the Aurignacian provinces and that the Azilian signs find here their explanation.

The degradation of the human figures painted in these rock shelters of Eastern Spain, to symbols in themselves quite unintelligible, is illustrated in Fig. 21, where on each of the three lines can be seen on the dexter side summary but quite recognizable representations of human figures taken from the Spanish rocks, while the last figure on the sinister side, marked M. d. A., comes from an Azilian painted pebble, the other figures of the line showing the intermediate stages. The plate from which these are taken comes as Lamina xxiv in Hugo Obermaier's *El Hombre Fósil*,¹ and is based on investiga-

¹ Madrid, 1925.

tions by the Abbé Breuil. As a concrete example attention may be directed to Fig. 22 showing subjects that occur, though not together and not contemporaneous, in the Spanish rock paintings. On the sinister side is a hunter and his quarry quite sufficiently naturalistic, on the dexter side a recognizable hunter is engaged with an object that is really a Stag, with four legs, a tail, and pair of antlers, while above is a rendering of the same creature that has lost all resemblance to nature, but can be interpreted from the other picture. On this difficult subject of degeneration something further is said at the end of Chapter VII (p. 191 f.).

CHAPTER III

THE CAVES AND THEIR DENIZENS; THE BEGINNINGS OF REPRESENTATIVE ART

THERE has been noticed the importance of the flint industry which has attached the attribute 'lithic' to the designations of the vast periods of time between the appearance of man as an intelligent being upon earth and the first use of metals which seems in comparison a thing of yesterday. We have seen it to be a natural assumption that wood and bone and horn would also be from the first employed, and while it would not be expected that many wooden implements could survive from the older palaeolithic age, those of bone and horn would naturally be looked for, and one very ancient bone implement as well as one of wood we have found actually extant (p. 34). It is however true that bone implements from even the uppermost strata of the older palaeolithic are very rare, and this particular artifact is essentially a product of the later palaeolithic age which comes in with the Aurignacians. When it was established that in this age man had become an inhabitant of caves and rock shelters, investigators became busy in excavating the floors of these for the sake of recovering objects which had been possessed and used by him, or which in some way attested his presence and his mode of life upon the sites. Bone implements were among the most interesting objects thus brought to light, and about 1840 an epoch-making discovery was effected in a French cave of one of these fragments of bone on which were incised the figures of two Hinds. The cave was that of Chaffaud in the Department of the Vienne, and the finder, M. Brouillet père, may be signalized as the discoverer of fossil man as artist, just as Boucher de



FIG. 23. THE CHAFFAUD PIECE, AT ST-GERMAIN.

Perthes had been of fossil man as a being of intelligence and resource who lived tens of thousands of years before our time.

But as fossil man in general so the newly revealed quaternary artist was at first denied, and the Chaffaud piece, shown in Fig. 23, was put down as a specimen of Gaulish art. Attention was however now directed to the fresh possibilities, and the floors of caves were narrowly inspected, important results of these new investigations being published in 1875 in the *Reliquiae Aquitanicae*, an illustrated work embodying the results of the joint labours of the Englishman Christy and the French archaeologist Edouard Lartet in the caves of the Dordogne. The drawing of the Mammoth previously noticed was the subject of one of the most interesting of the plates. Among those whose attention was by these discoveries drawn to the limestone caverns of different localities was a Spanish landowner of the Santander Province, who had on his estate an ancient cavern the entrance to which had been closed since distant geological times, but had recently been reopened in connection with quarrying operations. In 1875 this Señor de Sautuola had entered the cave, to be known later on to all the world as Altamira, with his mind set on floor deposits, but had casually noticed as he strayed along some marks in black pigment upon the walls. A few years later, in 1879, he was there again on the same quest, and had brought with him his seven-year-old daughter, who deserves

her little niche in the temple of fame. As he was poring over the floor débris she came jumping and stumbling towards him, and, if we may playfully invent a colloquy, crying out ‘O padre mio, there are pictures of beasts in the cave.’ ‘Nonsense, dear’—such may be imagined as the response—‘run away and play, I am busy.’ ‘Well, but I have really seen a picture of a bull.’ ‘Oh, indeed, then our new herdsman has been trying to draw some of our cattle.’ ‘No, it is not one of ours, for it has got a great hump on its back.’ ‘A hump on its back ! Dios mio, what does the child mean ? Show me, dear.’ And penetrating a little further into the grotto, where the roof was almost low enough to be touched, they lifted their eyes, and in a moment one of the most interesting archaeological discoveries of modern times was an accomplished fact.

The animals, Bisons with humps on their backs, one of which, though perhaps too often reproduced, is shown in Fig. 24, Cervides (see Frontispiece, No. 1), Wild Boars, Fig. 25, etc., displayed in red and black on a low flat roof, or as the French call it ‘plafond,’ near the entrance of the Altamira cave, represent the culmination of a form of art quite unknown before as a pre-historic product, though practised abundantly enough among existing hunter tribes in Australia, Africa, and elsewhere. Cave paintings were known to exist among the haunts of the so-called Bushmen of South Africa, so that the form of the art was familiar, though the unexpected appearance of it on the walls of the Spanish cave was startling enough. Sautuola, when the extraordinary sight was revealed to him, proceeded in the most correct fashion to publish it with a very good illustration of the plafond in a brochure issued at Santander in the following year, 1880, wherein the paintings were claimed as quaternary. The function of duly exploiting the discovery was entrusted to a well-known Spanish savant of the day, but fortune so brought it about that he muddled the affair and abandoned the position to the sceptics, who were of course almost as much in evidence then



FIG. 24. The best preserved Altamira
Bison.



FIG. 25. The Galloping Wild Boar at
Altamira.

as in the days of Boucher de Perthes. The consequence was that the whole discovery was practically 'turned down,' and M. Salomon Reinach, in his invaluable *Répertoire de l'Art Quaternaire*,¹ says that in 1895 the paintings at Altamira were entirely forgotten. The discovery however about the turn of the century of other similar paintings in caves of the Pyrenees and Dordogne districts that could be proved of quaternary date, notably the caves of Font de Gaume and Les Combarelles on the Vézère, at once vindicated the genuineness and importance of Sautuola's find.

Then began an era of great activity in the exploration of caves in search of specimens of what the French call 'L'Art Pariétal' or the art of the 'parois' or walls of the caverns, and in the formalization and publication of results, the last end being greatly furthered by the scientific zeal and munificence of the late Prince of Monaco. He built and endowed the Institut de Paléontologie Humaine at Paris, which has been the headquarters of the constant and fruitful activity of the Abbé Henri Breuil, who has devoted himself to the almost herculean task of accurately copying the various pictures and devices on the walls and roofs of the principal caverns, and, with some aid from other specialists, of preparing the whole material for publication in the huge volumes financed by the

¹ Paris, Leroux, 1913, p. xxvi. The small book contains outline drawings of almost all the pre-historic wall paintings known at the time of its publication.



FIG. 26. Site of Cavern of Castillo from Puente Viesgo.



FIG. 27. Approach to Cavern of Font de Gaume.

Prince. When it is realized that almost up to 1900 Altamira remained solitary forlorn and ignored, while there are now known some sixty grottos in which art of a similar kind is represented, it will be seen over what an extensive field the student of palaeolithic art has now to range.

The 'painted caves,' as they are sometimes called, vary of course very greatly in situation and surroundings, in extent, and in accessibility. A list of those of outstanding importance, in the classic region of South-Western France and Northern Spain shown in the Map, Fig. 9, opposite (p. 47), will be found in the Map itself at its dexter end, and the examples there enumerated are grouped in their districts with an indication in each case of the town or village from which the particular cavern can best be visited. The best known name is that of Altamira, and though the map at its western verge shows the site as the most distant by land journey from Great Britain of any of the caves it is in practice the nearest of all, for Santander is easily accessible by the Pacific Line steamers from Liverpool,

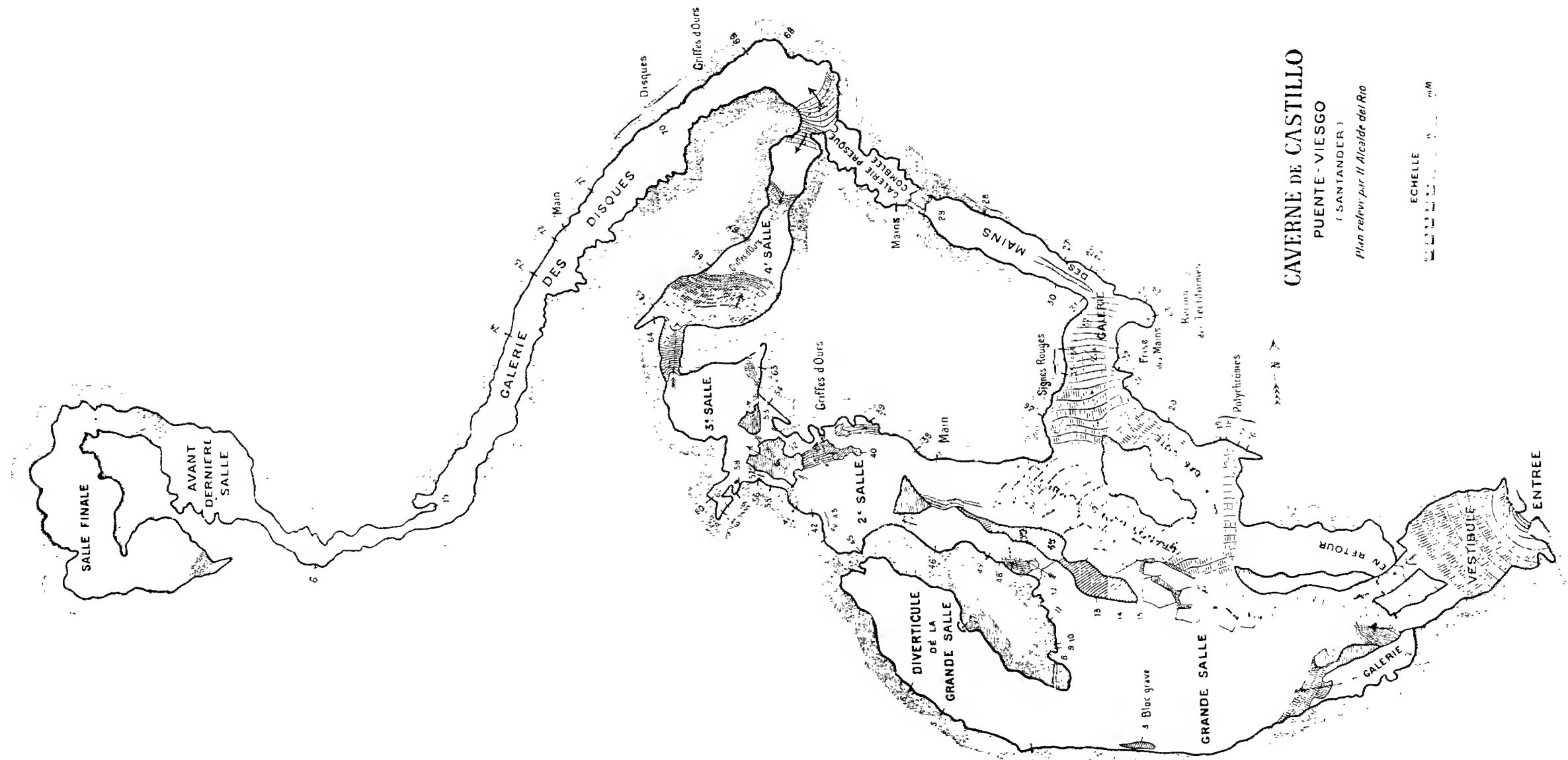


FIG. 28. Plan of Cavern of Castillo

and the painted cave is only a taxi drive from that port. There is nothing anywhere to compare with the paintings on the Altamira plafond, and everyone should see them, but the cave has lost a good deal of its attractiveness by being made into a regular show place, with guide, electric light, admission tickets, and the rest. Far more interesting is a visit under expert guidance to the not-distant cavern of Castillo. The bold limestone peak beneath which it lies overlooks the pleasant village of Puente Viesgo with its thermal establishment, and the white cross in Fig. 26 indicates the entrance to it. Castillo, an extensive cave with many ramifications, was discovered in 1903 by Don Hermilio Alcalde del Rio who with others carried out its thorough exploration, and made the plan of it given in Fig. 28.¹ Few antiquarian excursions can be more interesting than a visit to Castillo under the guidance of this accomplished archaeologist. The entrance, Fig. 29, is now free and open, but when Don Hermilio began to exploit his discovery there were deposits on the floor of the cave to a height of about forty-five feet or almost to the roof, and the whole of this material was of archaeological importance and interest. Some years were spent by Professor Obermaier and others in a stratigraphical analysis of the twenty-five successive layers that could be distinguished, thirteen of which produced objects indicating one or other of the sub-periods of prehistoric culture from the Acheulian or perhaps Chellian up to the first age of bronze.² Intermediate barren layers showed that the occupation of the cave by man was not quite continuous, and Professor Osborn writes of it that 'This station, repaired to and then abandoned by tribe after tribe over a period estimated at present at not less than 50,000 years, is

¹ Copied with the kind permission of the author from the work *Las Pinturas y Grabados de las Cavernas Prehistóricas de la Provincia de Santander*, por Hermilio Alcalde del Rio, Director de la Escuela de Artes y Oficios de Torrelavega, Santander, 1906.

² *El Hombre Fiel*, Madrid, 1925, p. 175.

a monumental volume of pre-history, read and interpreted by the archaeologist almost as clearly as if the whole record were in writing.¹ Castillo is easy of access and perambulation and so are the two principal Dordogne caves, those of Combarelles and Font de Gaume. The entrance to the latter among precipitous rocks is seen in Fig. 27. Electric light is installed in it. On the other hand the neighbouring cave to Castillo, La Pasiega, is less easily traversed, and to penetrate into Le Portel near Foix is an exhilarating scramble. Water is very commonly to be reckoned with, though most of the caves are now fairly dry. In one case, that of Tuc d'Audoubert in the French Pyrenees, the original stream that had excavated its winding tunnels and spacious halls still issues from its mouth, and entrance is only possible in a boat. Some of the caves such as the magnificent cavern of Niaux near Foix, said by cave experts to be the finest in all Europe, end in extended lakes, the remains of the former streams. The same applies to the newest important discovery, the remarkable cave of Montespan in the Haute Garonne, at first only to be fully explored by swimming under water, which filled part of a long tunnel to the roof.²

The first addition that the bare stone walls of the caves received in remote geological epochs was a coating of clay deposited by the streams that had formed them. The clay thus left by the waters still in many cases remains soft to the touch, but its condition is often changed when the walls and roof and floor of the cavern become encrusted and hung and blocked beneath by stalagmitic accretions, Fig. 30. The internal economy of the caves is largely conditioned by these, and they have sometimes great scientific value in connection with the making and the preservation of the artistic designs and especially their chronology. What was once a coating on

¹ *Men of the Old Stone Age*, London, 1926, p. 165.

² *Alrededor del Mundo*, num. 1445, Madrid, Feb. 26, 1927, p. 281.

Count Bégon in *Revue Anthropologique*, 1923.



FIG. 29. Entrance to Castillo.



FIG. 30. Stalactites in Castillo.

the rock of soft clay may have been rendered indestructible by a thin incrustation of this kind, and the transparent film has preserved, while it still renders visible, any mark that may have been impressed upon it. Anything drawn or painted on the surface of the rock may in a similar manner be rendered indelible by such a glassy coating. The fact that such a film has been formed attests of course the authenticity and the antiquity of what appears below.

The earliest signs of life in the caves concern not their human inhabitants but the wild beasts that found in them a lair before man came upon the scene. One of the most interesting of these is *Felis Spelaea* the Cave Lion or Tiger that figures occasionally—Professor Osborn says ‘frequently’¹—in the parietal art of the caverns. There is one at Combarelles, of which Fig. 31 gives a direct photograph from the original drawing, and Fig. 32 the creature drawn out by the Abbé Breuil. In Fig. 31 the head is clearly visible a little on the dexter side of the centre of the photograph. It is incised work on the surface of the rock. In Fig. 33 is seen a noble skull of the savage beast, with teeth two-and-a-half inches long, at St-Germain, from Grotte de l’Herm, Arriège. The chief of these previous tenants however was the great Cave Bear (*Ursus Spelaeus*), a formidable monster, of which there

¹ *Men of the Old Stone Age*, p. 47.

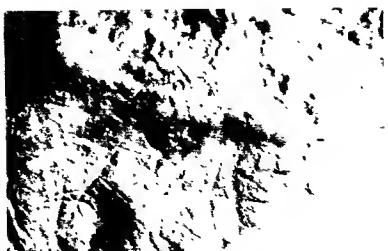


FIG. 31. Incised drawing of Feline at Combarelles. Head on dexter side of centre of photograph.

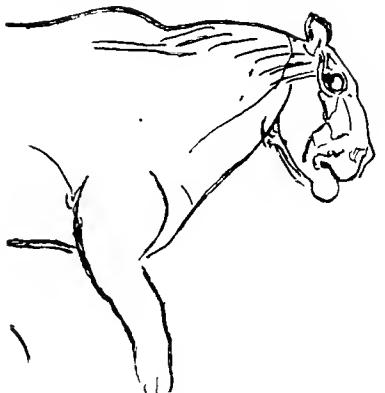


FIG. 32. Feline drawn out by H. Breuil.

is a fine skeleton in the Museum at Toulouse. A skull at Paris measures about twenty-one inches from front to back. A vertical cave wall at Combarelles exhibits an excellent incised representation of this animal, but as there are other animals drawn close to it it is not easy even in a sharp photograph like Fig. 35 to get it clear without the aid of the Breuil drawing in Fig. 36. An incised line, as was seen in the case of the Mammoth in Fig. 3, can only be brought out if the light strikes athwart and not along it. To assist the reader, the two white arrows below in Fig. 35 point, the dexter one to the limit of the creature's forehead, the other to the heel of the right hind leg. The photograph is of course untouched. Other species of Bear were extant at the time, but the Cave Bear 'par excellence' is known by his domical forehead. How the men of the time got the better of him is hard to say, as he would climb out of most pits that he might be enticed into. Certain appearances in extant skulls have given rise to the notion that the hunter lay in wait for him and struck him with a heavy stone over the left eye. Traces of his occupation of the caves are numerous in deeply ploughed marks of his claws in the clay or the stalagmite that covered the rocks, or, as often occurs, in the rock itself where this has degenerated



FIG. 33. Skull of Cave Feline.



FIG. 34. Claw Marks of Cave Bear at Font de Gaume.

to softness under chemical conditions of the atmosphere. Font de Gaume is prolific of these so-called 'griffades,' see Fig. 34. His footprints are to be seen in the Altamira cave. There are cases in which these 'griffades' are to be seen across wall paintings that are the work of man, and this shows that even after the creature had been dispossessed he might make a counter invasion to recover his old domain. These claw marks are of even greater interest than the creature's bones, which still remain in abundance in some of the caves, as at Cabrerets in the Lot, not far from Cahors. Here an enthusiastic explorer, the Abbé Lemozi, has seen his efforts crowned with conspicuous success.¹ The limestone cliffs of the region are honeycombed with caverns only some of which show traces of palaeolithic man. These were the playgrounds of the young parishioners of the Curé, who took great pains to instil into their minds a decent reverence for the interesting works alike of Nature and of man. He used to take the lads out walks on Sundays to show them and tell them about the caves so that they should learn that they were not things to defile or injure. They had to repeat the names of the grottos, and on one occasion a year or two ago after the known sites

¹ There are many caves in the Commune of Cabrerets, Lot; the one spoken of here is known as 'Pech Merle.' The explorer's account of his work here has the interest of a romance.

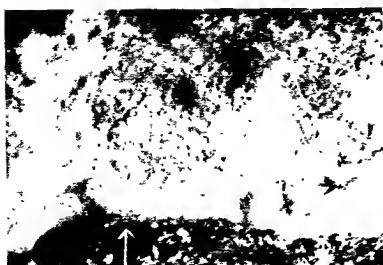


FIG. 35. Incised drawing of Cave Bear at Combarelles.

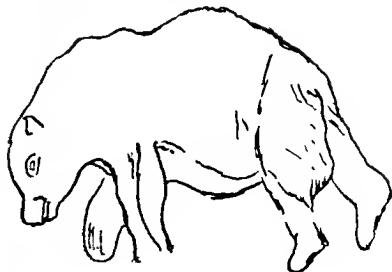


FIG. 36. Cave Bear at Combarelles, drawn out by H. Breuil.

had been enumerated a little lad timidly remarked that there was an unexplored way down into a cave from a field beyond his father's farm. The Abbé eagerly followed thither his little guide, and a difficult descent was made with the aid of ropes till a narrow gallery, apparently limitless in its length and windings, was reached. This ultimately gave very grudgingly access to more ample spaces on the walls of which were abundant traces of human handiwork, while the floors were strewn with the bones of *Ursus Spelaeus* and of carnivora such as the Cave Tiger and the Hyena. Such wonders did the cave reveal that for months on end the Abbé forced his way almost daily through the original narrow clefts and drew and described all that was there to be seen. As time went on the attention of a wealthy French citizen of antiquarian tastes was directed to the promising discoveries, and he set on foot and financed on a generous scale a thorough exploration. By a combination of sagacity and good luck, the Abbé divined, and divined rightly, where it would be possible to make a cutting in the hillside above so as to tap one of the more spacious galleries. This was successfully accomplished at the first attempt, and when convenient access was thus secured, the generous friend just spoken of, M. Lebaudy, took the place in hand, smoothed a path through its windings, and bordered it with a wire fencing, erecting flights of wooden steps for access from one level to another, so that preservation

of all the treasures is secured, while these are at the same time left clearly visible. At one place you pause and over the wire fencing look down on the imprint, in what was once soft clay and is still now impressionable, of two small naked human feet, clearly those of a woman. M. Lemozi's enthusiasm carries him so far that he discerns some children's footsteps close by and pictures the palaeolithic mother taking her family for a stroll round their underground domain. The prints of the adult feet are quite clear, and if these be not interesting one does not know what pre-historic archaeology has to offer of attraction. It may be noticed that at Font de Gaume the Commission on Ancient Monuments has adopted this same scheme with the addition of electric lighting. Without these arrangements at Cabrerets how could these footprints have survived with irresponsible sightseers trampling about in freedom with their heavy boots?

In those caves where there was a clay deposit on walls as well as floor the former shows marks of fingers, and though these may seem at first sight little different from the footprints, yet for our subject, the beginnings of art, they have a very special value. In themselves they possess even a poignant human interest because they express the owner's personality far more than imprints of the less individualized foot. Count Bégouen, who holds the chair of pre-historic archaeology in the University of Toulouse, and on whose estate are the two caverns, each with its unique point of interest, Tuc d'Audoubert and Trois Frères, was exploring a very narrow tortuous passage in one of these, and to pull himself round an awkward corner he laid hold of a vertical angle of rock on his right hand. On a subsequent examination of the spot he discovered under a thin transparent coating of stalagmite the impress in the clay that had covered the stone of the fingers of a palaeolithic cavern dweller who had helped himself round the same corner perhaps twenty thousand years ago. The coincidence made, as well it might, a profound impression upon the Count.

In parts on the cave walls and low roofs we see quite casual marks of the fingers, as if to clean them against the stone after handling clay for some domestic purpose. Elsewhere we may see that the fingers had been drawn over the clay-covered surface more or less evenly and evidently with intent. They are sometimes drawn straight down the wall, the four fingers making parallel marks half-an-inch apart, or at other times the parallel marks are wavy or distinctly curved in their direction, and appearances are produced that have been humorously compared to macaroni. These parallel lines whether straight or curved seem sometimes to have been made by a sort of tool like a comb with three or four teeth, securing greater evenness in the parallelism of the lines than would be attained by the fingers. It can be seen at once that it is one thing to dabble aimlessly, as children may, in the soft and yielding material, and it is quite another thing to make the lines follow a determined direction. Figs. 37 and 38 are illustrative. Fig. 37 shows only a panel of wall in one of the caves covered with casual finger marks mostly in straight lines, while in Fig. 38 the lines, equally casual, have the wayward curvature of the 'macaroni.' In other examples there is distinct evidence of intention, but this may at the moment only be signalized, its significance being left for discussion on a succeeding page.

Before entering on this discussion, notice must be taken of markings of a different kind. Impressions in soft clay are in the plastic material used in his art by the sculptor. Markings in light and shade or colour on a flat surface carry us over into the domain of painting, and to these we must now transfer our attention.

Any form of drawing or painting on the flat is differentiated from all kinds of modelling in that it requires the application of colouring matter or pigment. Now the use of matter of the kind for covering or making marks on a more or less flat surface is not an invention of the Aurignacian age. It must

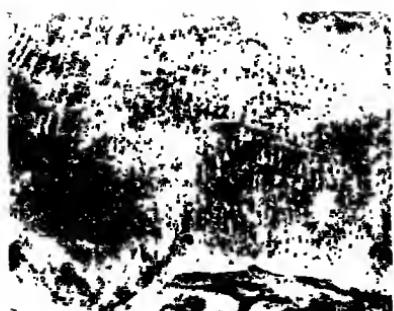


FIG. 37. Finger Marks in the clay coating of a Cave wall, mostly straight.

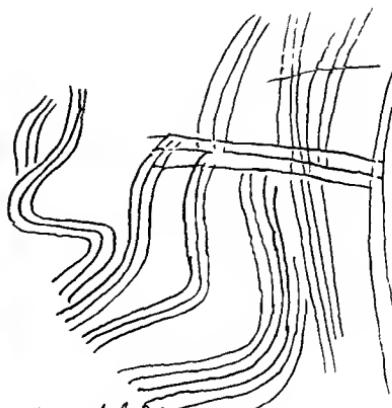


FIG. 38. So called 'Macaroni.'

have been employed far earlier and in all probability in connection with the human body. It has even been suggested that the corporeal frame of *Homo Sapiens*, when he was first emerging from the anthropoid and passing to the virile condition, would be smeared with sundry substances to replace the furry covering inherited from four-footed ancestors.¹ At any rate the connection of colouring matter with the body is attested by burial custom, for certainly from the Cro-Magnon period onwards, if not earlier, red ochre or red haematite was employed in burials, and the earth in which skeletons are found and the bones themselves with objects buried with them are found impregnated or stained with the red pigment. Crude ochres red and yellow occur freely as natural deposits in the region of the Dordogne caves. Lamp-black must from the earliest cave-dwelling period have been abundant, for the lamps fed with oil from animal fat must have smoked considerably. Black oxide of manganese was also used and is said to last better than lamp-black. White, which is rare, is calcined marl. Greens and blues do not appear. M. Déchelette, in his *Archéologie Préhistorique*, has a valuable page or

¹ Hoernes-Menghin, *Urgeschichte der bildenden Kunst in Europa*, 3 Aufl., Wien, 1925, p. 18.

two with technical details on this subject, and figures some little tubes of bone of Aurignacian date that were found with powdered red ochre in them in one of the caves.¹

It follows that coloured pigments were available in the earliest Aurignacian epoch, and what seems to be their first use in art was for productions of a very curious kind. The reference is to stencilled representations of the open human hand, which are among the very earliest as well as the most intriguing designs found on the cave walls. Fig. 39 gives some examples from Castillo. The left hand with fingers and thumb spread out was placed against the wall, and colouring matter, red or black, was dabbed on the stone in between and around them, or, as some suggest, blown from the mouth, so as to give a coloured background to the silhouette left on the wall when the hand was removed. Sometimes however the open hand was itself covered with the pigment and then pressed against the wall so as to achieve what may be called a positive reproduction. It is very noteworthy that these same hands with their positive and negative colouring occur in the wall paintings of the caves of Central Australia.² What meaning attached or attaches to them in their most antique or more modern forms, it is impossible here to inquire, but that the old examples had at any rate at times some special significance may be inferred from the fact that they are sometimes accompanied by signs that look like characters in a prehistoric alphabet, and may be supposed to carry out or enforce their meaning. Such signs, though rare, do occur in parietal art as well as occasionally in the 'art mobilier' and are naturally highly intriguing. A small collection of them is shown in Fig. 40. The signs in the dexter bottom corner (which are something more than the simpler 'alphabet' signs) occur as part of a remarkable device in the Spanish cave of La Pasiega, where we see, Fig. 41, on the sinister side

¹ Paris, Picard, 1908, p. 203 f.

² Altamira, Cartailhac, etc., Monaco, 1906, p. 208.



FIG. 39. Stencilled Hands at Castillo



FIG. 40. Enigmatical Signs on Cave walls.

of the signs the painted representation of the soles of two Human Feet. The device is on a conspicuous face of rock, near what was the original entrance to the cave but is now closed, and Señor Alcalde del Rio, the expert on these caves of the Santander Province, sees in the feet a mark of a claim to proprietorship while the signs may represent a habitation (p. 90), so that the design may be taken to signify the ‘ putting of his foot down ’ by the head of a family who claimed the cave or part of it as his own. This is of course all in the realm of conjecture, but the suggestion connects itself with a theory of the Hands, which are held by some to express, at any rate at times, the idea of ownership.¹ There is no opportunity within the limits of this book to discuss questions of the symbolic intention of the various appearances in cavern art, though these cannot be passed over altogether in silence. What is more germane to our special subject is the possible relation of the Hand picture to the footprint in the clay of the cave floor. This, a purely natural product, is at the same time a representation—something that is not a foot and yet brings a foot before the mind. A hand-print could be secured

¹ In the principal cave at Cabrerets called ‘ Pech Merle ’ there seems strong evidence of this.

by pressure of the palm and spread fingers on a clay surface to match the footprint, but this was only done in the case of the separate fingers and the stencilling device was adopted for the complete representation. As pigments had been for a long time in familiar use the technical process of stencilling may have been evolved under some special conditions of which we are ignorant. In the 'Hand' technique in any case pigment was laid on deliberately to produce the impression of some object, and though the method of reproduction is mechanical we must recognize this as a beginning of representative art.

Going back now to the lines impressed in the soft clay, we have noticed casual lines, curved or more or less straight, that are in no sense an artistic product. Now, in Fig. 42, below, we can see on the sinister side, from a paroi in Font de Gaume, the marks of fingers that have been drawn loosely down through the coating of soft clay without any formal intent, while beside them from Le Portel there is a group of similar grooves regularly spaced and following evenly a vertical direction. Intention is here obvious and an aesthetic interest is present because we have here the first step towards geometrical pattern making. The regularity is not in itself artistic, because, as will be seen later on, the repetition of the same single form over and over again is something merely mechanical and is aesthetically unattractive, whereas alternation and the balance of one element against another are essential to the production of an artistic pattern. Still, regularity is a first step towards artistic arrangement.

The case of the curved groups is different and more complicated, and the evolution from them of something artistic is not direct, but involves an intermediate process that is of the highest importance. The process is a mental one and a part of the psychology of the pre-historic hunter.

Primitive man, or at any rate Aurignacian and Magdalenian man, possessed not only the quick observant eye of the



FIG. 41. Painted Devices at La Pasiega.
Human feet and 'Teetiform' Sign.

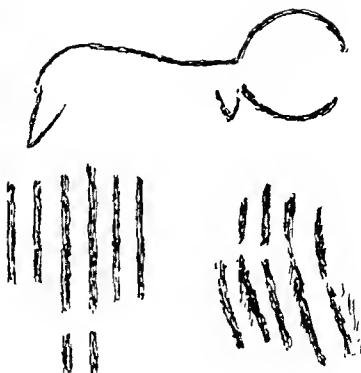


FIG. 42. Finger Marks.

hunter and his retentive memory of things once seen, but was alert in discerning resemblances between the forms of objects thus seen and ever present in memory and accidental appearances that might fall anywhere under his eye. This alertness is part of the hunter's fitness for his work and the result of his training in field and forest. When on the watch for game it is of the utmost moment to be able to distinguish what is a part of the living creature desired as a prey from some natural object or objects that for the moment look like it. The fact that such accidental similarities exist was forced in upon the hunter's mind and he became phenomenally quick at discerning them. It will be shown as we proceed that it was quite a common phenomenon in the cave life of these times for the primitive hunter-artist to note a purely fortuitous resemblance between an oddly shaped projection of rock or of stalagnite and an animal's figure or part of one, and it was a phenomenon almost equally common, and one of transcendent importance, that he found himself urged—urged by what? can we at the moment say more than this—urged by the imitative instinct common to men and animals to make the resemblance more complete by adding some strokes by the graver or the paint brush. We shall have before us as we proceed many curious



FIG. 43, Point of rock at Castillo,
worked out into a head.



FIG. 44, Sketch of Feline on soft clay
at La Clotilde.

illustrations of this habit, and it will be sufficient here to give in Fig. 43 one striking example from Castillo, where a spur of rock projecting downwards had the shape and proportions of an animal's head, and the likeness was carried out by painting in an eye and a nostril. If this were a common habit among the hunter-artists we can easily understand that these casual wavy 'macaroni' lines would here and there exhibit a shape suggestive of some animal, and would instil into the human consciousness the idea that lines of the kind could be made to look like something in nature that was known and remembered. Representative art we may say was born when this likeness was observed and the impulse was felt first to improve it and then to try something fresh of the same kind, the stencilling of the open hand having perhaps already given the idea of making a picture.

It must of course be recognized that there are vastly important steps, first, between scribbling an idle mark or two with the finger on the clay coating of the wall, and the making

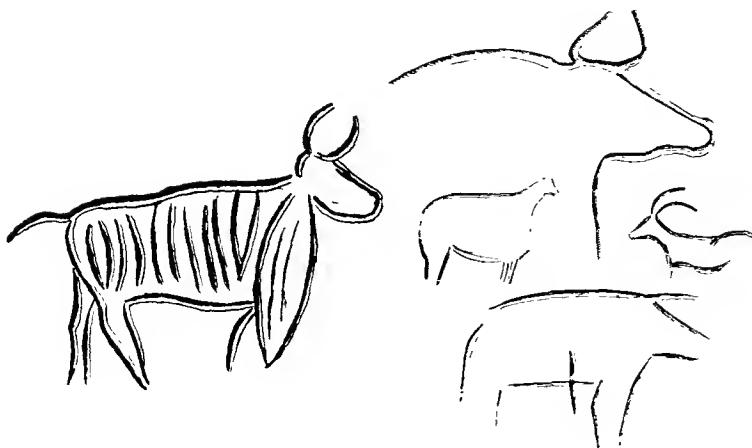


FIG. 45. Ox drawn in clay from
La Clotilde.

FIG. 46. Animals in primitive
technique from Hornos.

of deliberate marks of the same kind in order to convey the impression of some remembered object, and, next, between merely working out the hints accidentally given, and setting to work *de novo* to make a representation out of nothing. This birth of representative art as we have just called it was an event of cosmic significance, like the birth of Athene from the brain of her father Zeus, and in the sphere of culture was as pregnant with future possibilities as was in its way the invention of fire.

The upper part of Fig. 42 has shown a drawing with the finger on clay of early Aurignacian date that gives an idea of what may have been a first attempt at independent design. The artist had in his mind's eye a Bouquetin or Ibex, the horns of which had impressed him with their length and even sweep of curvature, and he has exaggerated their size and made them form almost a complete circle. The head is ridiculously small, but the back and the hind leg are in fair proportion. The drawing in clay at La Clotilde, shown in Fig. 44, represents a clear advance on Fig. 42. It is a rough sketch of a feline creature, probably from its mane indicated by rough

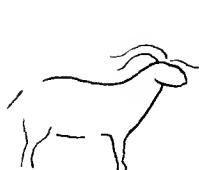
FIG. 47. Animals from Pair-non-Pair.¹

FIG. 48. Sketches at Altamira.

vertical strokes a Cave Lion, with wide open jaws, a vigorously rendered eye, and also an ear. Better still is the Ox from the same cave in a like technique, Fig. 45, and others not so detailed from Hornos de la Peña, Fig. 46. These are all in the most primitive of all the techniques represented in the caves, and Professor Macalister thinks that the groove impressed by the finger in the clay is the model for the incised line in the rock,² a very early and very common method of delineation.

This incised technique and also the painted line are used in quite early Aurignacian work, but the earliest efforts in each kind have not to the writer's knowledge been identified. In the cave of Pair-non-Pair near Bordeaux there are primitive Aurignacian drawings of animals in outline the early date of which is attested by incontrovertible evidence the nature of which will presently be explained. Fig. 47 gives four of them, and note should be taken of the animal with its head turned back, an occasional motive of some interest that appears here for the first time. Some spirited sketches on parts of the Altamira plafond will be somewhat later and exhibit quite an advanced knowledge of drawing, Fig. 48, *Altamira*, Fig. 50.

¹ *Altamira*, p. 19.

² *Text Book*, p. 460.



FIG. 49. The La Grange Bison, from a photograph by the writer. Length about two feet.

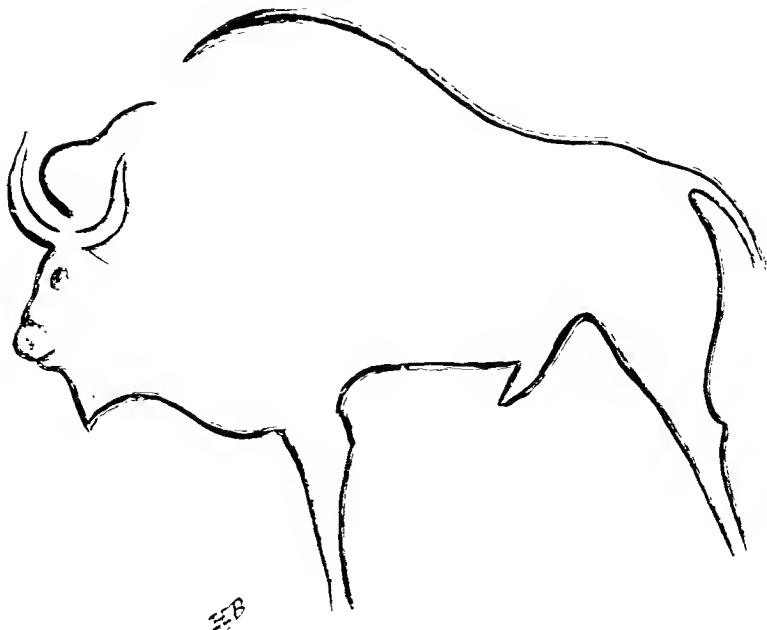


FIG. 50. The La Grèze Bison as drawn by Henri Breuil.

It will now be observed that except in Fig. 45 the profile view is severely maintained so that only one of each pair of legs is visible. This is always an early sign¹ and it is conspicuous in a piece that may be taken as representing matured early Aurignacian art at its best. This is shown in Fig. 49 and is a Bison about two feet long firmly drawn with a deeply incised outline on the rock of the small grotto of La Grèze near Les Eyzies. The cave, it should be observed, is quite small and open to the daylight, so that the designs like those at Cap Blanc (p. 106 f.) were by no manner of means shrouded in mystical gloom. The photograph shows it fairly clearly, but the Abbé Breuil's drawing, Fig. 50, may be used to supplement it. It is fortunately datable with certainty and

¹ But early work need not always show it, for M. Didon's investigation of the Abri Blanchard, Périgord, brought to light part of a Bison painted on stone, of Middle Aurignacian date, with all four legs complete (Museum of Périgueux). See (p. 223 f.).

on the following evidence which is the same in character as that which attests the early date of Fig. 4⁻ from Pair-non-Pair. The piece is located in a small recess very low down on the wall, and was only discovered when the floor deposits that had entirely hidden it had been dug away and searched for artifacts of flint or bone. Now these remains of human occupation when carefully examined were seen to be of Solutrian date, so that the engraving on the wall must have been executed prior to the Solutrian period, and that means that it was certainly Aurignacian. It is one of the finest extant examples of this severe archaic style, large and simple in its lines and invested with a monumental dignity.

With this classic piece the parietal art of the caves may be said to have come into its own. It develops of course later on in the Magdalenian sub-period into more elaborate forms and exhibits endless variety, but we go back to the La Grèze Bison just as in Greek sculpture we go back to the Apollo from the Olympic pediment, as something austereley beautiful that commands our reverence as well as our admiration.

CHAPTER IV

A GENERAL VIEW OF THE PARIETAL ART OF THE CAVES

THE demonstration in the last chapter of the probable or possible stages in the early development of what appears later on full-grown as the Aurignacian art of the caverns, suggests naturally the criticism that it assumes the beginnings of Aurignacian art to be contemporary with Aurignacian beginnings as a whole. If however we picture to ourselves a new and gifted race of fine brain capacity and physique making their appearance at the end of the Mousterian period and superseding or exterminating the Neanderthal people, we must credit them with a past history during the ages of which they would naturally have developed the capacities with which as a race they had been endowed. Now as a fact not a few writers have urged the view as almost self-evident that this wonderful parietal art had been cultivated for a long period before it makes its appearance in the French and Spanish caves. Herbert Kuhn exclaims, 'The Aurignacian race brought with them to the South a completely formed art,'¹ and even the Abbé Breuil at the opening of the already quoted article on 'Les Origines de l'Art'² writes that 'the sculptured figures that are met with from the very beginning of the Aurignacian period, or the engraved designs which show themselves equally early, prove that art is here in many respects by no means at its beginnings. The statuettes from Brassempouy testify in effect to a long artistic past of more ancient date about which we know nothing.' These two

¹ *Die Mäuse der Löwen*, p. 17.

² *Journal de Psychologie*, 15 avril, 1925, p. 289.

divergent views cannot both be true. Either the art does begin under our own eyes, as it were, in the finger marks in the clay of the cave walls and quickly and independently reaches in all essentials the perfection that was within its range, or it was brought in by the people as an established product that had passed through its initial stages elsewhere long ago, and this fact illustrates what was said in the Introductory chapter about the existence of questions complex and difficult that still await their solution.

Where the Aurignacians came from, and under what influences their pre-history began and developed, is still a matter of controversy. Kühn we have just seen brings them from the North, while others have fancied ethnological indications which would connect them with the men of the Canary Islands. Both an Asiatic origin and an African one have been maintained, and if the selection be Asiatic there is a further choice between the alternative routes of migration from East to West along the northern or the southern coast of the Mediterranean. If the hypothesis of the southern route be favoured it could be assumed that in the progress from Asia westwards the migrating people might receive and assimilate African elements of culture which would mingle with the Asiatic. Thus the Brassemouy ladies have been supposed by some to exhibit in their build Hottentot affinities, and by others have been connected with the familiar nude figures of the Nature Goddess of the people of the Nearer East, the ultimate origin of which may be very early. The only monumental remains on any of the suggested routes that might be brought into connection with Aurignacian art are to be found in Northern Africa and Southern and Eastern Spain, where the possible line of Aurignacian migration is marked by the same kind of artifacts that we are familiar with in the caves, by wall paintings and incised rock drawings of animals, that some authorities such as Catedrático Obermaier¹

¹ *El Hombre Fósil*, Madrid, 1925, pp. 126 f., 228 f., etc.

claim to have been the inspiration of Aurignacian art. This introduces the subject of what is known as 'Capsian' art, the adjective covering this Southern Spanish and African art, and on this some pages will be encountered later on in this book (p. 213 f.), but the relations in point of art and of chronology between Capsian art and that of the French caves are very far from being established. Some good authorities again ignore the possible pre-history of the art we know as Aurignacian, and of the female figurines Professor Osborn writes, 'With due regard for analogies, it would rather appear probable that this archaic sculpture was autochthonous.'¹ One is inclined to agree with Hoernes when he writes that 'in view of such glaring differences of opinion among recognized authorities the question of the races and peoples of these ancient artistic periods had in the meantime better be left out of account.'² With Macalister and Miles Burkitt we may provisionally take the initial processes which, following the Abbé Breuil's analysis, we have sketched in the last chapter, as representing the real beginnings of an art that as the last named writer has remarked developed with remarkable rapidity.³ This conclusion is really forced upon us when we consider a work like the La Grèze Bison of Fig. 49. It possesses qualities of style that one can easily regard as the outcome of a long period of artistic development prior to the appearance of Cro-Magnon man in the West. On the other hand there are distinctly primitive features in the piece, such as the crude drawing of the horns, the neglect of the extremities and the uncompromising profilization that would certainly have been overcome during such a period. On the whole therefore we may allow the account in the last chapter to stand.

It will conduce to clearness if from this point onwards

¹ *Men of the Old Stone Age*, 1926, p. 323.

² Hoernes-Menghin, *Urgeschichte der bildenden Kunst*, 1925, p. 133.

³ 'L'Art naturaliste des parois semble naître très vite au milieu des entrelacs argile.'—*Journal de Psychologie*, 1926, p. 371.

for a chapter or two we devote ourselves to gaining a general idea of this ‘Art Pariétal,’ as the French call it, of the caves. A word of caution is however necessary at the outset. This phase of the cultural activities of pre-historic man is of such extraordinary interest that it overshadows other forms of artistic productivity that were in existence at the same time, and were probably of far older date than the coming of Aurignacian man, who is commonly hailed as the first artist. He was only the first artist in the sense that he was the first to turn his artistic powers in the direction of the representation of the forms of nature. He was the first painter of anything that may be termed a picture, and probably the first sculptor, but in the present state of our knowledge we cannot safely term him the first artist. The representative arts do seem to have their first beginnings in the Aurignacian age, but we must remember in dealing with them that other forms of art, such as personal adornment and the dance, were being practised at the same time, while some of them may have been in existence long before.

The first question to ask about this parietal art is its relation to what the French call ‘Art Mobilier,’ or the art that attached itself to movable and therefore comparatively small objects in bone or horn such as are found in floor deposits and had been known a good many years before parietal art was in evidence. The comparative size of the artistic objects makes one difference obvious enough when we contrast a half-life-size painted Reindeer with a relief of the same creature on a bit of horn a few inches long. At the same time we shall note as we go on that mural designs were sometimes on quite a small scale while objects of mobiliary art, like the stone slabs from Laussel (p. 98), might run to a very fair size. In the matters of subject and of artistic treatment there is considerable though not absolute similarity, and we shall have to note as we proceed that certain subjects occur abundantly in one of the forms of art and not, save exceptionally, in

the other. In the main however the subjects are the same throughout and similarity may be assumed in the absence of any indication to the contrary. In technique the use of the graving tool is constant through all the periods of the two arts, but painting is specially parietal, though traces of the use of pigment on objects of mobiliary art are to be discerned.

The connection between these two forms of palaeolithic art is of great importance from the chronological standpoint. Objects of mobiliary art are far more numerous than those of the more monumental order, and their preservation has been secured through the fact that they were buried in the earth and sand of the floors of caves and rock shelters. These 'gisements,' to use the French word, or places of deposit, as they are found in rock shelters as well as in caves greatly exceed in number the painted caves, so that comparisons between one 'gisement' and another are easy as well as, of course, instructive. Since the various mobiliary objects, implements, weapons, articles of parure, on the one side, and on the other pieces of bone or horn or stone merely used as a basis for artistic work, are found in regular layers superimposed one on the other to a height or depth of ten or twenty or forty feet, their comparative dates can with a little trouble be fixed from the position of the stratum which has yielded them up. The number of the different localities yielding these deposits rendered checks by means of comparison easy, and as a result it became possible to arrange a series of museum cases, as at the Museum at Périgueux, in chronological order displaying typical objects from all the sub-periods from early Aurignacian to latest Magdalenian or beyond. It is through the establishment of this stratigraphical scheme that the most decisive criterion for the chronology of the parietal art has been arrived at. Sufficient cases exist in which, as at *La Grèze* or *Pair-non-Pair*, the removal of a deep floor deposit the date of which can be fixed stratigraphically has revealed upon the wall against which it had been heaped some work of

parietal art which is proved thereby to date *before* the datable accumulation that had concealed it. The Abbé Breuil has recorded four cases including those of La Grèze and Pair-non-Pair in an article in the *Revue Archéologique*, Vol. xix, 1912, entitled 'L'Age des Cavernes et Roches Ornées de France et d'Espagne,' and gives details also of other scientific methods by which the important question of dating in parietal art has been practically settled.

I. Taking the parietal art by itself, we may inquire about the forms it assumes, that is to say the objects which it presents or portrays, and the technical means it employs to give them visibility. These objects may be enumerated in the inverse order of their importance, for in our treatment it will be convenient to deal with and dismiss at the outset what are to us the less important, because non-artistic, operations of the practitioner. We may notice first those very curious marks like alphabetical characters which can at times be seen combined with the representations of hands or other objects and regarded as explanatory of these. They occur also in the 'art mobilier,' as designs on objects mostly of bone and on a small scale, in which case they have been called marks of ownership.¹ A number of them have been figured in Fig. 40 but no interpretation is here attempted.

II. 'Red Signs and Black Signs' is the title of an important class of designs, as a rule of early date, that are distributed in loose and unintelligible fashion over the walls and roofs of most of the Spanish and French caverns. They are sometimes displayed in groups, at other times dotted about here and there singly or in twos and threes. Naturally they are hard of interpretation, but there are certain fairly well defined classes each of which may have a passing word. The signs

¹ Or signatures of artists; so M. Marcellin Boule suggests as possible, *Fossil Men*, Eng. Trans., Edin., 1923, p. 254.

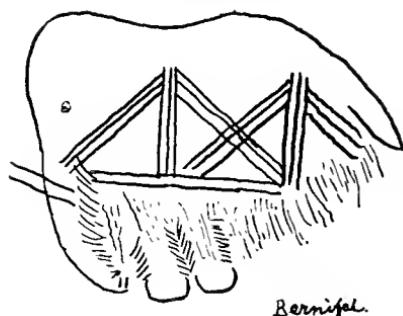


FIG. 51. Tectiform Sign superimposed on a Mammoth.

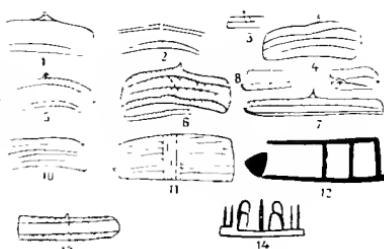


FIG. 52. Tectiforms representing huts (?) of various kinds.

called 'Tectiform' make what is perhaps the largest and certainly the most important class. Many of them have an appearance that justifies the explanation of them as representations or symbols of tent- or hut-like dwellings. Some have an upright post in the middle with lines indicating beams sloping down on each side sometimes apparently to the ground, Fig. 51, but also with a lesser slope to the top of comparatively low upright lateral posts, so as to present the aspect of the gable end of a hut like a Bedouin tent, Fig. 52. Other Tectiforms seem to show wooden huts copying the circular form of bell-shaped tents. Some of these pictures that are possibly of structures have been explained as snares. There is one at Niaux near the terminal lakes, of which Fig. 53 gives a photograph. The upright lines are held to indicate ranges of posts between which an animal might be guided or allured to a lethal chamber beyond. Some faint indication of such a quarry has been discerned above the posts. Perhaps the most important single Tectiform Sign is a large one covering a good space of wall in the cave of La Mouthe, near Les Eyzies. It is drawn with brown and yellow lines only faintly relieved against the similarly tinted rock, but the reproduction sufficiently shows a large hut in cross-section like an inverted V, seen, the Abbé thinks, in a three-quarter view. One recognizes at any rate one side and the gable end, Fig. 54. Other such



FIG. 53. Sign showing structure interpreted as a Snare. At Niaux.



FIG. 54. Large Tectiform Sign at La Mouthe, Dordogne.

signs have been likened to boats. Signs of simpler form showing one object only have been called 'Claviform' from their resemblance to clubs, or 'Scutiform' because they look like shields, and in connection with some of these there may be mentioned a fact that has a wider application to other Signs, namely that symbols of very much the same forms occur in the cave paintings of the Australian aborigines. This is especially the case with the Claviform Signs from Niaux in Fig. 55. Australian signs can be found closely resembling them. Other Signs are called 'Pectiform' or comb-like, and seem to be a conventionalization of the marks we have seen made in soft clay by the fingers of the open hand. Under this same heading of Red and Black Signs may be included collections or rows of dots in one of the two colours. Sometimes these dots fill in animal outlines in whole or in part and have been thought to stand for stones flung at the creature in the process of a hunt. Some groups of these various enigmatical Signs are shown in Fig. 56. The groups of dots have been explained as water, some of the forms as boats. Taking these devices and the quasi-alphabetical signs together there are undoubtedly indications that they were meant to be seen and 'read' if the latter word may be used. They are sometimes arranged carefully on exposed rock surfaces in or accessible from the main galleries, as is the case with those



FIG. 55. Claviform Signs at Niaux.

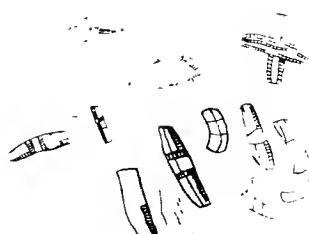


FIG. 56. Enigmatical Signs at Castillo.

shown in Fig. 56 at Castillo, and in the grand cavern of Niaux large spaces are thus utilized, so that in the official description the expression 'véritables pages d'inscriptions' is quoted about them.¹ The Signs are however often enough hidden away in recesses.

III. A third heading would include a set of artifacts on which are designs of a totally different artistic character from that of the naturally treated representations on the cave walling. These however, though artistic manifestations of the upper palaeolithic period, belong entirely to the mobiliary art, the art of the comparatively small objects found in excavating the floors of caves and rock shelters, and make no appearance in the parietal art of these 'abris.' This is one of the differences already noticed (p. 87) as existing between parietal and mobiliary art, and another difference is that the movable objects do not exhibit the Tectiform and other such devices so common on the parois. The patterns we are concerned with here are purely linear or geometrical devices consisting in parallel lines, zigzags, chevrons, diamonds, and the like, incised on bones or on horn, or in bosses that stand out from the ground that is cut away about them. These elements are arranged in geometrical patterns that are the earliest examples of such things in the world and about which a good deal falls to be said. Apart too from the straight line patterns, we have

¹ *L'Anthropologie*, 1908, p. 22.

the curious phenomenon of the appearance of spirals, the earliest examples of this very widespread and constant motive. The work is most commonly found on slender pointed bones that formed the heads of light javelins or assegais, but for reasons which will afterwards appear, it must be passed over in this place. (See p. 188 f.)

IV. Mention must be made however of a comparatively very rare but highly interesting form of design of a phyllo-morphic kind, that is, one that figures leaves and flowers. Among the immense mass of animal representations these indications of foliage are highly intriguing and one would hardly think them possible did they not actually exist. They occur in parietal as well as in mobiliary art, though there are a number of examples in which it is doubtful whether a floral motive is really present in what may after all be a mere play of lines. No one can doubt for instance that the design in Fig. 57 and Fig. 58, 1,¹ really represents a leafy twig, and the same may be said of the plant with its root in Fig. 58, 5, and perhaps of Fig. 58, 2, but the cases of Fig. 58, 3, 1, and of the branch-like forms in Fig. 59, a specimen of parietal art, are more doubtful.

V. That phase of decorative art which consists in the conventionalizing for a decorative purpose of natural forms is one that cannot possibly have come into use before Aurignacian times. It depends of course on the previous existence of representations of natural objects as they actually are. The modifications of the natural forms for use as ornament must necessarily come later. There will be an opportunity in the sequel (p. 194 f.) for considering this particular form of art, which plays an interesting though a limited part in the artistic activities of the period.

¹ Fig. 58 is taken by the kind permission of the publishers, Messrs Pocard et Fils, from Fig. 9c in D'achelette's *Archéologie Préhistorique*.



FIG. 57. Phyllomorphic design on bone at St-Germain.



FIG. 58. Phyllomorphic designs on bone, from Déchelette.

In real truth this form of art, if the expression may be allowed, is the most genuinely artistic of all forms of art, and makes a correspondingly limited appeal to the popular taste which regards the representative side of formative art as alone of interest. In art of this kind the establishment of relations is all in all, and success in it demands a rare insight into structure and material and the technical handling of material, and supreme boldness in making all the elements brought into the work subserve the artistic purpose in view, no matter what violence be done to the literal truth of the natural forms pressed into the service of the design. The finest examples known of this kind of work are the five-legged Assyrian winged bulls of the time of Assur-natsir-pal or Sargon II, from whose palace at Khorsabad the magnificent specimens in the British Museum were obtained. The intention and use, the symbolic meaning, the material and the location, of the impossible creature, are clearly realized, and are expressed in the highly conventionalized natural forms disposed with a masterly sense of style so as all to work together for the effect required. If Magdalenian art show any apprehension of the principles of this austere super-art this will be one of the most

important things to notice about it. The subject is taken up in Chapter VIII.

VI. The Human figure. The treatment of this motive in both the parietal and the mobiliary art of the time is very slight, and is aesthetically disappointing though from the anthropological point of view presenting points of curious interest. In the first place there is the significant fact, of which due account will have to be taken later on, that the female form is far better treated than the male. Among the earliest examples of Aurignacian figure art are sundry studies of the female form carved in the round in Mammoth ivory. Anything in this material is presumably early in the artistic period for the Mammoth belongs to Aurignacian times, and as the later palaeolithic period advanced the beast became rarer and his place was taken by the Reindeer. When the tusk of the creature is recent the material is soft and it lends itself readily to the purposes of the carver, but later on it gets harder and more refractory, so it is accepted as almost certain that these female figures were carved at the early date when the Mammoth was still a familiar object on the plains of Western France. The objects first came to light in the cave of Brasempouy, Landes, in the French Pyrenees district, and were published by Edouard Piette, who was the 'doyen' of the numerous investigators who have since his time been devoting themselves to these researches. The most characteristic is a lumpy figure with female characteristics, of a build that has reminded many people of Hottentot women. The type of form is the reverse of what in these days we are taught to admire as 'willowy,' and presents in exaggerated fulness physical characteristics that appeal to a taste that is not exactly now in fashion. The German adjective 'dick,' which was in older days used with a note of admiration, expressed the idea to a nicety. This original Brasempouy lady is now one of several of the same aspect that have been



FIG. 59. ENIGMATICAL SIGNS FROM
ALTAMIRA.

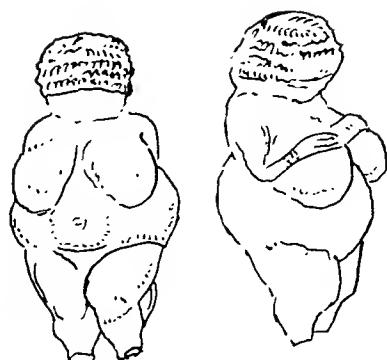


FIG. 60. FEMALE IMAGE FROM
WILLENDORF, AUSTRIA.

found since, at the Grimaldi caves near Mentone, at Willendorf in Lower Austria, Fig. 60, and elsewhere. It is noteworthy however that in Piette's find at Brassemouy there occurred some feminine studies of a quite different character by no means devoid of grace and delicacy. One little head of a girl carved in the Mammoth ivory is charmingly coquettish and wears her hair, one is concerned to see, quite long and treated in a fashion that makes it resemble an Egyptian wig. The eyes and the mouth are not indicated in the carving but were possibly added in colour. All Piette's finds in this particular kind are put together in a table case in the Salle Piette of the Museum of Saint-Germain, and are seen in Fig. 61. Two views of the small girl's head from a cast are given in Fig. 62. Fig. 61 shows other pieces of the same kind.

In the parietal art we do not find representations of the female form of this character and there are few pictures of women on the walls. Of the male form there are a large number of representations, all of a very sketchy kind, so that Moritz Hoernes has called the male figure a sort of step-child in pre-historic art. On the cave walls it is only drawn in outline and never filled in with colour. The figures are shown



FIG. 61. Female forms in Mammoth ivory. Piette Collection at St-Germain.



FIG. 62. Head of Girl at St-Germain.

in profile often with the arms stretched out in front, and M. Luquet has an ingenious explanation of this. He thinks that the artist was influenced by his habit of drawing animals. Quadrupeds have their limbs set at right angles to the trunk, and the designer was so accustomed to this arrangement that he instinctively drew the upper limbs of the human figure in the same relative position. Breuil on the other hand at one time at any rate thought that the stretched-out arms might indicate the act of supplication, and a religious idea might be enshrined in the pieces. The figures are in most cases certainly human, as is shown specially by the feet, but the profile of the faces can hardly be recognized as anthropomorphic, and it has been suggested that what we see is the mask of some animal with which the man has invested himself. This would suggest the familiar savage rite of the dance in animal disguises, held to exercise a compelling magical influence on the beast thus personated. The attitude of some of the figures suggests a dancer's pose or action, but this subject of magic and the various methods of its exercise must be deferred for future consideration. Specimens of these sketchy representations are given in Fig. 63. A few exhibit tails or horns, and there are peculiarities about others that do



FIG. 63. Male figures in parietal art.



FIG. 64. Female and Male figures in relief on stone, from Laussel, Dordogne.

not lend themselves 'convenablement' to reproduction. The figures appear sometimes to be grouped with animals, and this introduces new pictorial motives that must be considered later on.

On objects of mobiliary art the male figure engraved or in low relief occurs much more often than the female, but the former is not nearly so often represented in the round as is the case with the women. A form of art which occupies a sort of middle position between mobiliary art in the shape of small studies on pieces of bone or horn a few inches long, and the mural designs which are often though by no means always on a fairly large scale, is represented by some figures in relief upon stone about eighteen inches high that came to light in the great rock shelter of Laussel in the Dordogne (see Fig. 11). It is difficult to see what purpose they can have served, and they may be regarded as independent works, the stone in each case not being an object of use but just a panel chosen to receive a design. One shows a woman of the corpulent build of the female studies in the round holding up in her right hand a horn, and another a man shown in profile, though with the upper part broken away. It has been suggested that he was using a bow, but the employment of this weapon among

the Aurignacians is problematical. The original pieces are in the interesting Museum at Les Eyzies, and have been often figured.

This male figure from Laussel is one of the most remarkable of all the human representations. It is a male figure treated without any fanciful or mystical suggestion, in the spirit, Herbert Kühn suggests, of the slender athletic figures of Hellenic art. It is not at rest but in action though the purpose of the outstretched arm is uncertain, and the left leg is brought into view in the fashion of mature relief technique. The writer just referred to thinks that the pose is a three-quarter one, but the absence of the right arm makes the upper part of the torso doubtful. The girdle is specially noteworthy as it is the only example of a piece of clothing known in the art. The date is late Aurignacian, and Kühn sums it up as an artistic achievement which without doubt can be placed by the side of Mycenaean or even Greek reliefs. The damaged condition of the piece makes any sweeping assertion like the above decidedly risky, though the upper part, had it been preserved, might have afforded some warrant for it.

CHAPTER V

THE ANIMAL ART OF THE CAVES

VII. It has been estimated that four-fifths of the representations in the parietal art are of animals, and this brings us to the most important and artistically the most interesting section of this part of our subject.

It must be understood that the art with which we have here to deal is essentially the same in the two sub-periods Aurignacian and Magdalenian though these are separated by the sub-period called after Solutré. Solutré culture we have already seen reason to regard as intrusive, and it neither carries on the characteristic Aurignacian styles of work nor prepares the way for the Magdalenian. With its fine and delicate achievement in the chipped flint industry it makes a certain artistic contribution of its own, but a quite different one from that characteristic of the two other sub-periods, and these may really be regarded as coalescing again after the Solutrian break so that they represent a continuous artistic tradition. This has been well put by an Italian scholar in the following words :—‘The glyptic of the Aurignacian and Magdalenian periods is one and the same ; the soul of it is one, and we cannot accordingly divide it in arbitrary fashion into two distinct bodies. This art cannot have been produced except by a single people, a race by itself, endowed with an exquisite artistic sentiment, a race directed and permeated by a system of spiritual beliefs profoundly rooted in its social organism.’¹

A question of nomenclature arises here that is worth a

¹ R. Battaglia, in *Rivista d' Antropologia*, xxiv, 1920, p. 437.

moment's attention. If the two periods, Aurignacian and Magdalenian, be at any rate from the aesthetic point of view essentially one, a convenient common name is a desideratum, but the only term available is the clumsy 'Aurignacian-Magdalenian.' To avoid this stumbling-block, the single term 'Aurignacian' is sometimes used for the whole upper palaeolithic period to distinguish this artistic epoch from the earlier non-artistic Mousterian, or from the perhaps contemporary but certainly in some ways parallel artistic epoch of Southern Spain called 'Capsian.' This has the disadvantage that 'Aurignacian' comes to be used in two senses, a very general one as just indicated, and a stricter one in which it applies only to the Cro-Magnon epoch after the Mousterian and before the Solutrian, and distinguishes the earlier artistic phenomena such as those discussed at the end of Chapter III from the more developed ones of the La Madeleine age. It should be explained that in these chapters the term Aurignacian is used only in the stricter sense and generally with the connotation 'early.'

It will conduce to clearness if there be drawn up at the outset a series of headings each of which embraces some point or points of special interest about the animal art, under which the treatment of the whole theme may conveniently be divided.

- (1) The relation between parietal animal art and the same art displayed on mobile objects.
- (2) Various technical processes employed in each kind of art.
- (3) Nature of subjects, materials and their uses, superpositions of designs, as indicating comparative dates.
- (4) Location of the paintings in relation to other traces of human habitation in the caves, and in relation to the topography of the caves.
- (5) Placing of the pictures in relation to the spectator :

The use of indications furnished by accidents of the rock surfaces,

- (6) The authors of the drawings and the conditions under which they came to be executed : The magical theory.
- (7) The merits and the limitations of Aurignacian-Magdalenian design : Study of details : Beginnings of three-dimensional drawing.
- (8) Advances towards grouping and the natural setting of objects : Artistic composition.

(1) Parietal and Mobiliary Art have been already envisaged as essentially while not entirely similar in artistic character, though the average size of the representations is much greater in the former case. We have noted however pieces intermediate in size (Laussel) and have seen that the designs on these are not decorative but merely use the stone slab as a stele or panel or a patch of living rock on a cave wall. Now in the mobiliary art proper the pieces of bone or horn are often used just in the same way, and a conspicuous example is the Mammoth drawing already examined, Fig. 3, while in other cases the piece is a weapon or implement of some kind and the design would normally be an ornament in subordination to the whole object of which it is only a part. It is what in modern parlance is termed 'applied art,' but the canons of this kind of art as currently understood are only partially recognized in the palaeolithic work. That is to say the forms of nature are not as a rule conventionalized or artistically modified so as to conform to the character or shape of the object. They are more often just treated naturalistically and put in where there happens to be a place for them, with the full form if a space of the right size and shape be available, as in the case of the Mammoth (p. 20), or, if not, with a portion of the form only, the head perhaps standing for the whole. The fact that these pieces of bone are often more or

less cylindrical makes an elaborate drawing difficult and encourages a summary treatment. Fig. 65 from the work by Lartet and Christy shows a number of these, as a rule casually disposed, animals or parts of animals on pieces of bone or horn some of which are implements. There are exceptional cases however in which other considerations come in, and we shall notice these on a later page (p. 194 f.).

Of naturalistic drawings on movable objects that are not implements a particularly interesting set came to light a few years ago at the place called Limeuil, at the point where the Vézère flows into the Dordogne. A boldly projecting promontory of rock here plunges steeply down towards the stream, Fig. 66. At the summit of it is a pre-historic station of La Madeleine date. From this there ran down a gully to the flat ground beside the rivers. For some reason not quite agreed on by the local experts, the archaeological material that had collected to a considerable depth on the floor of the rock shelter was thrown, or slipped, or was washed, down the gully and disposed over the flat river margin below, where building operations just before the war led to its existence being discovered. Amidst the débris thus brought down from the shelter there came to light a great number of rough slabs of stone, irregular in surface and in outline, on which animal forms were represented in incised lines, and these it has been said constituted a species of works of art the like of which had never been seen before. No fewer than a hundred and thirty-seven of these fragments, mostly of limestone but also of other formations, exhibited intelligible



FIG. 65, Animals in mobiliary art.



FIG. 66. View of Limeuil from across the Dordogne.

designs, while a far greater number showed imperfect outlines, sketches, drawings crossing each other in a hopeless tangle, or a general medley of incisions impossible to read with any assurance. The sizes of the stones vary from a few inches to a foot and a half in longest dimension. The incised lines vary in depth and decision but are never mere scribbles. There is intention in them all, and this brings us in view of a hypothesis suggested by the accomplished investigators who brought the pieces to light and have published them with an interesting introduction.¹ As they point out, at times on the same stone may be found a finished and spirited delineation with beside it a similar design that seems to betray a prentice hand. Fig. 67 is a case in point. The same head occurs on both the right and the left side of the drawing, but whereas that on the dexter side is a feeble production, the head in the opposite corner is drawn with a bold firm line showing mastery of the form. In the middle part of the field there seem to be some other tentative studies of the same head. Again on many of the pieces there are corrections of lines previously drawn, as in Fig. 68, above, or successive attempts

¹ See for the title, etc., p. 4, note).

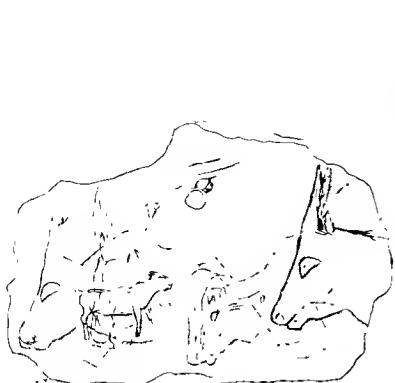


FIG. 67. Incised drawings on a slab from Limeuil.

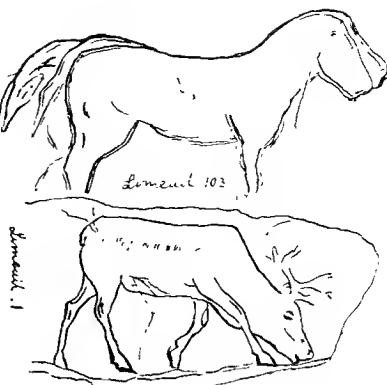


FIG. 68. Above, Horse with corrections; below, Browsing Reindeer.

to master the drawing of a limb that *will not* come right, Fig. 69, and all this led to the idea that we have here the stock-in-trade of a sort of artistic academy where the youthful hunter-artist might under proper direction learn his business, so that some drawings would be the work of a master hand while others were the trial pieces of the apprentice. Such hypotheses emanating from well-trained experts are always worth recording, though we may wait for further evidence before we accept them without reserve.

The Limeuil drawings are late Magdalenian and some of them, such as the Browsing Reindeer, Fig. 68, below, and Fig. 70, represent about the best work of the kind that is extant. Apart however from their intrinsic qualities, they have an interest for history and for artistic theory which gives them an outstanding value in connection with the vital question 'art for art' or 'art for magic' to which we shall have to return.

(2) Carrying forward a survey of the technical processes and materials used in parietal and mobiliary art both plastic and graphic, we shall see as we proceed on the one side specimens of pure sculpture employing stone as well as horn and sometimes stalagmite, both in the round and in bold relief,

and also models in clay, and on the other side fairly advanced and modelled polychrome painting, and leading up to this all

kinds of simpler brush work down to the plainest black outline. We have seen sculpture in the round on a small scale in the women of Brasempouy and Willendorf, and will have now to admire it in high relief on a monumental scale in the famous carved Horses of Cap Blanc.



FIG. 69. Ibex, with confused legs.

Cap Blanc is a rock shelter above the river Beune, a tributary of the Vézère, which shows a vertical rock face about fifty feet long by ten or twelve high with the usual hollow underneath that was filled up with ancient deposits well salted with bones of fossil animals and small works of art in the early La Madeleine style. The hollow ended at the sinister side in a small round rocky chamber with a carefully paved floor, giving the impression of a place of resort. When in the course of exploration all these deposits had been dug away, traces of human handiwork were seen on the face of the rock at the back of the hollow, and further investigation revealed what is in a measure the most wonderful production of palaeolithic art, or is only paralleled by the painted ceiling at Altamira. This is a frieze of animals, chiefly Horses, nearly life size, one Horse being over seven feet long, carved in the rock and standing out from the background as much as ten or twelve inches. The frieze, of course much damaged in parts, extends to the whole length of the shelter or about fifty feet as far as the rocky chamber, and to secure its proper preservation it has now been enclosed in modern walls of masonry.



FIG. 7c, The Brawling Reindeer from Linneul, at St-Germain. The animal measures about six inches from muzzle to tail. Lines below hardly seen in the print indicate the ground.



FIG. 71. Flash-light photograph of the present arrangement of the setting of the Frieze of Horses at Cap Blanc, Dordogne, a little retouched.

which follow its length along the outer edge of a sort of flat paved terrace formed in ancient times in front of the shelter, from which the frieze of animals could be fittingly seen. The wall rises till it meets and forms a junction with the face of the projecting rocky roof of the shelter and windows in it admit the daylight. A cross wall is built athwart the end where another property begins, access to which is denied. The flash-light photograph, Fig. 71, gives a fair idea of the whole arrangement. The long window wall is on the dexter side, and the cross wall with a small window in it is seen at the end. The frieze of Horses can just be discerned at the bottom of the photograph on the sinister side, and the rock roof of the shelter, which should show dark but has been illuminated by the flash, curves over above it to meet the window wall.

Coming to the details of the frieze of Horses, Fig. 72 shows the fore part of a Horse over six feet long with another about five feet long in front of it and so close that there was no room



FIG. 72. Horse in relief at Cap Blanc, with part of another following it.

for its tail. Its forelegs are pretty distinct but the head is much damaged. In Fig. 73 is shown a third Horse over seven feet long that faces the other way, that is, not like the frieze in general directed towards the round rocky chamber, but in the direction away from it. This fact may be taken to show in the artist or artists an absence of what may be termed the architectural or tectonic sense, for the movement of the procession of Horses towards the supposed place of resort may have had a symbolic meaning, which the sudden change of direction would render nugatory by the interruption. The head of the Horse here is well preserved, but the legs are hardly defined and were in a stratum of inferior stone. We note how the rock has been cut back to give the head relief, though the muzzle has not been brought out clearly. There were traces of colour on the sculpture when it was first freed from the earth banked up against it, and this may have been employed to accentuate details. The complete description of the sculpture given in *L'Anthropologie*¹ notices a number of other animals, by no means all Horses, that form part of this extraordinary collection of works in pure sculpture. Along the hollow the massive and imposing forms still stand out boldly from the background, though time has obliterated the finer details that we may assume were originally present. No advantage is taken of accidental prominences in the rock, and everything is freshly hewn out in the spirit of the best periods of the sculptural art. Henri Breuil does not say too much when he claims that in the matter of proportions and the boldness of the deep cutting the work does not yield in merit to the Greek and Roman friezes in high relief on the classical monuments.

It is worthy of remark in connection with this bold handling of stone, that, in the layers of deposit that were heaped up under the shelter and hid the Horses out of sight, there were found tools of flint of surprising size, forming 'an

¹ By Dr Lalanne and the Abbé Breuil. Vol. xxii. 1911, p. 385 f.



FIG. 73. Horse at Cap Blanc over seven feet long, in bold relief.

imposing group, quite abnormal, recalling the picks, hammers, axes of modern sculptors in stone,'¹ and with tools of the kind the frieze must have been wrought.

The influence of the magnificent Cap Blanc sculptures may perhaps be discerned in some interesting relief sculpture on a small scale which, as lately as 1924, M. Peyrony, the



FIG. 74. Bovides in relief at Les Eyzies.

guardian genius of the archaeology of the Vézère, brought to light in a Dordogne 'gisement.' It is in the Museum at Les Eyzies, and gives with much spirit a group of Bovides in various attitudes in pronounced though low relief. See Fig. 74.

Sculptural technique of quite another kind is represented by the remarkable

discoveries of 1912 in the cavern of Tuc d'Audoubert of two Bisons modelled in clay, and more recently in 1923 of animals similarly reproduced in the newly explored cavern of Montespan, near the château of the celebrated Marquise in the Haute Garonne. The two Bisons, a male and a female, each measuring in length about two feet, are shown in Fig. 75 which is taken from a very careful copy made on the spot in the very clay of the originals, deposits of which lie all around. The executant was the well-known artist-expert in the mounting of animals, M. Lacomme, of the Museum at Toulouse, where the copy is exhibited. The creatures it will be seen are full of life and spirit and their truth and the decision of their modelling place them artistically on a level with the best work of the period. What specially interests us here is the technique. Count Bégonen, on whose estate the cavern lies, and who with his

¹ I.e. p. 384.



FIG. 75. Copy by M. Lacomme, in the original material, of the clay Bisons in the Tuc d'Audoubert Cave. Museum at Toulouse.

sons has been its explorer, makes the very acute observation that the material is treated as if it were a solid mass, as of stone or stalagmite, out of which the form had to be hewn, and not a soft material that can be added in successive layers till the form required be built up to its full bulk and finished contours. Michelangelo in one of his letters notices that a sculptor may proceed in either of two ways, by the progressive reduction of a mass, as is the case with the carver in hard material, i.e. in his own words '*per forza di levare*', or, alternatively, by successive additions, as in modelling in clay or wax, which he calls '*per via di porre*', '*by the method of putting on*'. This last is of course the modern method of using the clay, which is commonly laid on in successive finger-like pieces which keep the surface rough and open till the whole length and breadth and thickness of the contemplated object are secured and all details fully emphasized. The Greeks certainly at times modelled in the same way, as the small unfinished head,

Fig. 76, sufficiently shows, where it will be seen that the bandeaux of the hair are each put on singly one by one in the

form of a little roll, but this essentially plastic method lay outside the range of the palaeolithic artists' ambitions. The two Bisons are thin as if carved in relief, and a very small sketch of a Bison in clay found near the group and now in the Museum of St-Germain is also thin and wanting in plastic fulness. That it was fashioned 'per forza di levare' is shown by the smooth mark made by a bone spatula that took off a strip of clay along the top. It may have been a preliminary study for the larger works, but it does not exhibit any of the dash and freedom with which a modeller really in touch with the alluring material might have knocked up his idea. 'Clay,'

FIG. 76. Greek Head showing modelling technique.



FIG. 78. Horse in 'noir modelé' technique, at Castillo.

as the studio saying runs, 'is a good servant but a bad master,' and the last clause is significant. It must at the same time be remembered that the early female figures in Mammoth ivory, though quite on a small scale, are treated thoroughly in the round with proportions nowhere stinted or flattened.

Before leaving the subject of the manipulation of clay there must be noticed the remarkable fact that the most primitive technique of all, the finger mark in the soft material, survives to or is revived at quite a late period. In Niaux,¹

¹ *L'Antiquité grecque*, vol. xix, 1909, p. 15 f., by MM. Cartailhac and Breuil.

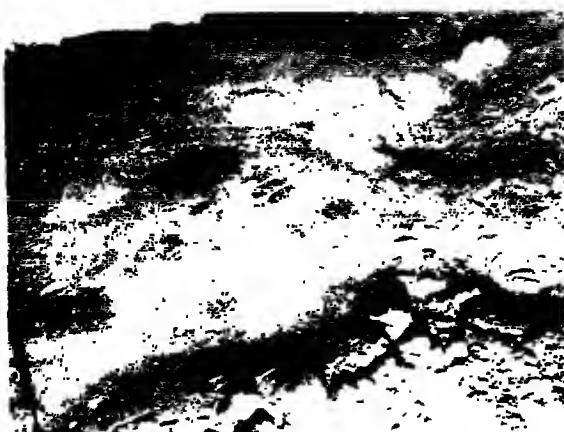


FIG. 77. A fish drawn with the finger or a tool in the soft clay of the floor of a recess in the Cave of Niaux.

which is not an early cave, there were discovered about 1907 a number of animal designs on the clay covered floor of the cavern of the same palaeolithic dates as the wall paintings. They were drawn not by the actual finger tip but by some instrument of about the same form and size ; their preservation is most extraordinary, and is due to the fact that they occur in recesses where there is a low roof above them so that visitors could not trample over them. The cavern has always been open and crowds have visited it through the centuries—there are graffiti with dates from the sixteenth century onwards. The clay too is still soft to the touch, and lamps placed upon the ground leave their impress, as can be seen on the sinister side of Fig. 77. Here, almost in the exact centre of the square of the illustration but a little above and on the dexter side of it, the eye can clearly distinguish the figure of a fish a little below a dark patch in the photograph. Fishes are rare in parietal art as are also birds, but there is a good sea-fish in the Spanish cave of Pindal which is on the shore, while this at Niaux is a fresh-water trout.

(3) Apart from the methods of handling them, the

materials themselves do not vary much in the case of parietal art, for rock and stalagmite are the same yesterday, today, and for ever, and the process of engraving on these with incised lines is very simple and very constant, so that the earliest 'gravures' do not differ appreciably from late ones such as those at Limeuil. In each age there are boldly indented furrows and slender shallow grooves the direction of which is often very hard to follow. If the incised line on stone come next in order of time to the finger marks on soft clay, it remains in use through the artistic period and is employed to reinforce the outlines of some of the most advanced La Madeleine polychrome animals, such as those on the Altamira plafond. In the domain of painting, equally constant are the ochres and oxides furnished by the soil, but the technical methods of their employment varied greatly and have distinct chronological significance. It is not probable that any one scheme of the succession of these methods can apply equally to all the painted caves, but the Abbé Breuil has described the painting technique in its various stages of development as illustrated at Altamira in Spain, and this may be taken as a standard. In that place, after the finger marks and early incised lines, there came with the first use of the brush plain outlines, and next outlines made broader and giving a certain effect of shading by the use of modified tones of the black or red pigment, for these seem to have been employed equally early. Fig. 78 gives an example of this technique, called in French '*noir modelé*'. The *noir modelé* process may be carried much further into complete chiaroscuro, as in the example shown later on in Fig. 101 (p. 149). The Abbé has satisfied himself that brushes of various sizes and kinds were made and used. Thirdly comes an era when the incised outlines are perfected and details are finely expressed with as much truth as decision. The age of advanced polychromy succeeds. The figure as a whole may be coloured brown or red, details such as horns, eyes, hoofs, being carefully



FIG. 79. Woolly Rhinoceros restored.



FIG. 8c. Woolly Rhinoceros in Font de Gaume, as drawn by Henri Breuil.

drawn in in black, while in some cases the incised line is used to secure greater accuracy and decision. Red, yellow, and black diversify the picture, the last pigment being used normally for the outlines. Examples of advanced polychrome work, though only in red and black, are shown on the Frontispiece. There are however many modifications of these methods of handling the brush. A painted outline may be plain and firm and continuous, like most of the outlines at Niaux, specimens of which may be seen in Fig. 84, but at times we see it reinforced by lateral strokes within it which give some idea of shading, or the actual line is replaced by freely drawn curved strokes that can be made distinctly to suggest roundnesses such as those of a creature's body and limbs. The best example of this indication of the third dimension of space by lines rather than continuous smudges is the much discussed Woolly Rhinoceros at Font de Gaume. A restored view of the creature as he must have appeared in life is given in Fig. 79, by the kindness of Professor Osborn, from one of the representations in the American Museum of Natural History. He shares as will be remembered with the Mammoth the distinction that he has come down to us in *propriâ personâ*. At Font de Gaume this creature is painted in red on one wall of an extremely narrow couloir in which the cavern comes to an end, and though faint is quite clearly to be discerned on a careful scrutiny, and the present writer has



FIG. 81. Woolly Rhinoceros *in situ* at Font de Gaume.

satisfied himself of the substantial accuracy of the published Breuil drawing given in Fig. 80. The actual location is shown in the photograph, Fig. 81, in which the general shape of the creature can be made out at the point where the prolongations of the two arrows would meet. It is worth while for a moment to compare this naive effort of the hunter of the old stone age with one of the finest sketches of a great animal in black chalk that the world has to show. Here, in Fig. 82, is one of Rembrandt's famous drawings of an elephant, and it will be seen that in places his point has caressed as it were the rounded form by the same curved strokes used by the Font de Gaume artist. At Niaux one of the Bisons in the Salon Noir has the roundness of its body underneath indicated in the same way with sweeping curves, see Fig. 148 (p. 226), and there is distinct manipulation in the shading under the fore-part of the Niaux Bison shown on the sinister side of the same illustration.

Another modification of the continuous outline of Niaux is seen very well marked in the Spanish cave of Covalanas, where it is changed for a sequence of red dots, Fig. 83. No

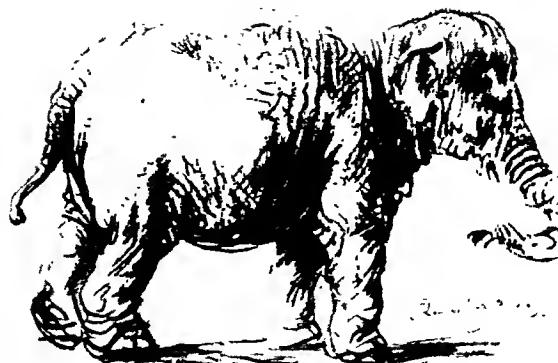


FIG. 82. Drawing in black chalk of an Elephant
by Rembrandt.

satisfactory explanation of this has been given, for the suggestion that the dots only gave a tentative line which might be altered, or if satisfactory might be replaced by a firm continuous stroke, has no evidence for its support and no instance of this substitution has been discovered. Fig. 84 gives some examples of the simple Niaux technique of the continuous black outline. It is a photograph of a portion of a wall in this cave, whereon with a little patience and attention nearly half a score of animals, chiefly Bisons, can be made out. The Abbé counts up seven Bisons and two Ibexes. To some details in the work we shall have to return.

The comparative dates at which these various techniques were used can often be inferred from what may be called 'superpositions.' When we come to deal critically with the art of these pieces we shall notice a curious insouciance on the part of the artists as to the placing of their designs. It is only rarely that we find that any effort has been made to get a smooth surface on which to draw or engrave by rubbing down the face of rock selected for the purpose, or, as the French say, by 'raclage.' At Castillo there is a small surface of rock that has been smoothed in this way and is shown in the photograph, Fig. 85, by its lighter colour. The roughness and



FIG. 83. Cervide drawn in lines or red dots in Cave of Covalanas.

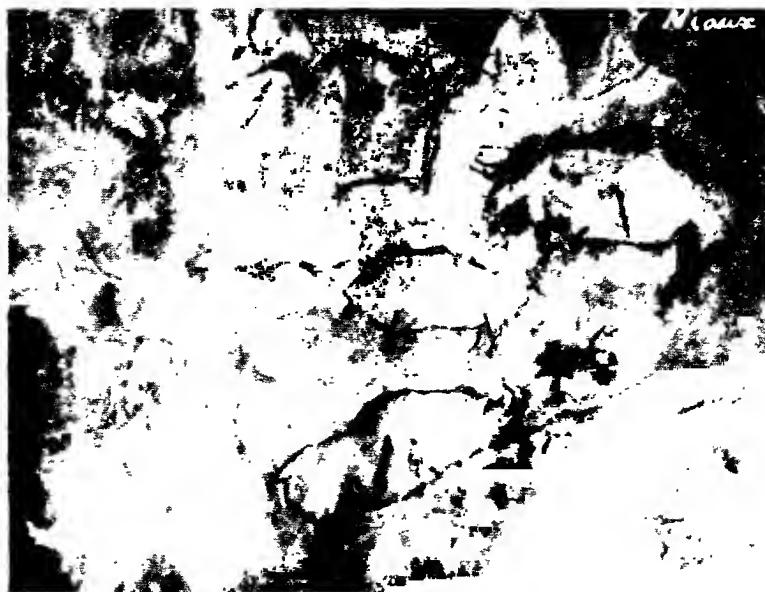


FIG. 84. Portion of a wall of the Cavern of Niaux, with figures of animals outlined in black.

irregularity of the slabs of coarse calcareous stone on which many delicate and precise drawings have been executed is quite remarkable. In the case of the lovely Reindeer from Limeuil, Fig. 70, the surface, as shown in the photograph, is so uneven that a modern draughtsman would never dream of drawing upon it, but the actual work is not only full of observation and sensibility but is most dainty in its handling. The animal in the original is about six inches long. Nor does it seem ever to matter to the draughtsman that his chosen surface is already in whole or in part occupied. He will draw a small animal in the middle of a larger one and pile a number of creatures on the top of each other sometimes in the most admired confusion. When this has been the case minute inspection will generally show which drawings are the earlier which the later, and if they are in different techniques or represent objects of divers classes a chronology can be based



FIG. 85. Portion of rock at Castillo smoothed for drawing on.

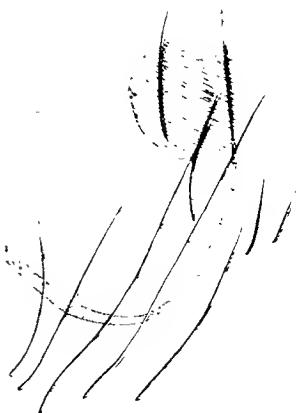


FIG. 86. Superimposed marks of Man and the Cave Bear at Castillo.

on their relative positions in the strata of superimposed designs. That extraordinary treasure-house the cave of Castillo furnishes a simple though striking example. The long curved band in Fig. 86 is an early piece of human handiwork, and over it and cutting across it are seen long claw marks of *Ursus Spelaeus*. Man however came again and drew in red the shaded disc above and across the claw marks, filling them in places with the red pigment. This little bit of figured history is very catching. Working in this way the great French investigator has arrived at important chronological results in caves to which he has devoted special attention, where there may be half-a-dozen different kinds of work superimposed in this fashion.

(4) The situations in which the drawings are found in the caves cause surprise and have been variously explained. These may be considered in relation (*a*) to the topography of the cave itself, and (*b*) to the indications in the caves of human occupation.

(*a*) It has often been noticed that the paintings are not near the mouths of the caves but in the majority of cases a

good way in where no natural light would be available. In fact when one enters a cave one does not begin to look out for pictures till one has advanced a fair distance. At Niaux, the dry and accessible part of which is a mile long, the painted Signs only begin when we are five hundred yards from the entrance. The cave of Combarelles in the Dordogne is about three hundred yards long and consists mainly in a narrow passage, three to six feet wide and high. Beginning at a point about a hundred and thirty yards from the mouth, about a hundred yards of this passage are covered with paintings on each side, comprising a hundred and nine figures of animals. At the neighbouring Font de Gaume most of the pictures are in a somewhat similar gallery, fifty yards long, beginning a hundred yards from the entrance.

Much has been made of this fact that the pictures are thus kept away from the daylight, and also of the fact that they are often not in main galleries like those just mentioned but in retired recesses at times difficult of access. This is markedly the case in caves that end as often happens in long narrow clefts, for designs are found on the walls when these approach so closely that only very thin archaeologists can squeeze between them. One of the most remarkable of all the single paintings is found almost at the very end of Font de Gaume, representing as we have just seen the Woolly Rhinoceros. The cleft is so narrow that it had to be drawn reflected in a mirror for there was no possibility of getting a straight view of it. Theories of the nature and intention of the animal paintings based on these facts will be noticed in the sequel, but it must be pointed out that the fact of the absence of paintings in the parts of the caves near the entrance does not necessarily prove that there were never any there, for the deleterious influence of the atmosphere with changes of temperature, acting in those parts of the caves but not further in, may account for their disappearance. On this question Breuil

thus expresses himself.¹ ‘The presence of these works of art in such concealed recesses is a fact that in itself is of a kind to make us reflect upon the true motives for these strange usages, but at the same time it should not make us lose sight of the truth that in certain caverns’—he enumerates ten of them—‘a portion of the paintings and incised drawings are in proximity to the entry, in positions where the light of day still penetrates, or penetrated before later falls of rock filled up the passages.’ It must also be remembered that the most important animal representations of all, the frieze of Horses at Cap Blanc, was in an open rock shelter, and had a terrace walk arranged so that it could be fully surveyed in the sunlight. In Southern and Eastern Spain there are pre-historic parietal paintings in the style called ‘Capsian,’ on which a word will have to be said, that are in open rock shelters and in the full light of day.

(b) Questions of a different kind but of equal interest are raised when we examine the relations between the paintings and the indications in the caves of human habitation. These indications are almost always found near the mouth of the caverns where the light of day could penetrate, and consist not only in the débris of hearths with deposits of charcoal and the usual flint and bone implements, but also in abundant remains of bones of animals used for food. A synopsis of the contents of these palaeolithic larders can in each case be drawn up, and it is a curious fact that the lists thus made out do not as a rule correspond to the lists of subjects represented further in on the walls. Thus in the early cave of Pair-non-Pair near Bordeaux the inhabitants evidently hunted for food the Rhinoceros, the Mammoth, and the Great Elk, but figured on the walls there are only Goats, Horses, and an Ox. At Marsoulas there were abundant bones of the Reindeer but only one doubtful picture of one has been signalized. On the other hand there is a marked exception to this rule at

¹ *Font de Gaume*, ch. v, p. 53.

Altamira, where the indications of the animals at the foyers show that these were of the same species that are represented in the wall and roof paintings. As illustrating this, Fig. 87 shows the hoof of a Bison that was found among the débris of a hearth at Altamira, and is now in the museum there. It is however a fact, the significance of which is noticed elsewhere (p. 165), that the cave was not actually inhabited at all at the epoch when the famous paintings were being executed. There is also at Altamira an exception in that the principal mural paintings, those on the famous plafond, are not at all remote, but occur at the further end of what might almost be termed an entrance hall. This accessibility of a display so striking that, whenever and by whomsoever seen, it must have excited wonder and interest, makes the fact seem extraordinary that it was only at the end noticed by accident.

(5) The placing of the pictures in relation to the spectator brings us to one of the most interesting points in connection with the whole of this work.

It is probably well known to all that practically every animal in this Aurignacian and Magdalenian wall decoration is in each instance figured, so to say, 'on its own' as a single thing out of all relation to its surroundings. So far is this isolation carried that save in the strikingly exceptional case of Limeuil (p. 160) there is no indication even of the ground on which the creature is standing, and in the case of the best known collection of these animals, that on the Altamira plafond just mentioned, there are some thirty large paintings of beasts not grouped in any artistic sense but put together in most irregular fashion with no indication of earth or air about them. A cursory examination of these and of other juxtaposed creatures in other caves reveals the remarkable fact that not only is there no ground for the creatures to stand upon, but if there were any they would not use it, for the long axis of their bodies has no recognized direction, but is turned any way about, so that the creature may be all on a slope, or



FIG. 88. View of the 'Plafond' at Altamira, from a photograph in the Altamira volume, Fig. 22, a little worked over.

standing on its head or its tail, or even appear upside down with all its legs in the air. The fact involves artistic considerations of some interest. At the first blush we derive a very high idea of the mastery of the artist over his theme from the fact that a creature in these outlandish positions is drawn with as firm and accurate a line, and in the same correct proportions, as if it were in one of the simple straight-away poses which every life-class student knows are far the easiest. It must at the same time be noticed, as we shall see, that animals which appear upside down are not necessarily drawn by the artist in such a position. It depends a good deal on where the draughtsman has taken his stand. In the second place the adoption of these positions has a special significance. It is due, certainly on the Altamira plafond, and also elsewhere, though certainly not in every case, to the seizure of some accident of the rocky surface that seemed to present a likeness to an animal form or to some portion of it. The surface of the plafond, though in general extension it is level, swells out here and there in flattened bosses of approximately circular or oval outline. The illustration, Fig. 88, which is an original photograph in the Altamira volume worked on to suit the present purpose, gives an idea of the plafond before the recent installation of the electric light, etc. Its slight elevation above the floor of the cave is shown by the standing human figure, and the natural bosses referred to come out very forcibly in the perspective view.

Three of these have been utilized for the forms of Bisons in a curled-up, recumbent position, the head and limbs being skilfully disposed within the limits of the natural projection, and the only parts that project beyond it and are painted on the flatter surfaces outside are the horns and the tail. Here it is evident that the 'intuition' of the Bison, as Croce would term it, was created in the artist's mind by the shape of the natural boss, and a welcome insight is afforded into at any rate one of the origins of the graphic art. Fig. 89 shows one



FIG. 87. Hoof of Bison
from the remains of
a domestic hearth at
Altamira.



FIG. 89. Recumbent Bison at Altamira.

of these curiously disposed recumbent creatures. It will be noticed in the sequel (p. 230).

This utilization of natural accidents of rock or stalagmite is an outstanding fact that meets one practically everywhere in the painted caves, and many of the illustrations shown for some other special purpose present also examples of this phenomenon. The Abbé Breuil has selected as the best example he knows¹ a Horse of fair size shown in Fig. 90 where the tail and hind legs are a natural stalagmite formation while the body and head, so far as can be made out, are cut in relief from the rock. Here Nature has been accommodating enough to make its stalactite tail 'hang down behind,' like those of the Horses that drew Nancy Lake's parents in the chaise to Drury Lane, and the hind leg to be not only of the right shape but in the correct position at right angles to the floor of the cave. It would have made no difference to the artist if Nature's contribution had been set quite awry—the creature would have been completed according to the original hint at whatever angle it would ultimately be turned. As proof of this, Fig. 91 gives a characteristic example from Castillo. Here a pillar of stalagmite has on its face a pro-

¹ *Forêt de Gauvre*, p. 157.



FIG. 90. Horse at Font de Gaume with tail and hind legs formed of natural stalagmite.

jecting boss of elongated form in a vertical position, and the outline of this on the sinister side is something like that of the back of a Bison. Below but out of the picture there are droppings of stalactite that suggest the hinder limbs of the creature. The upper part of the boss is treated like the Bison's hump and was painted with a broad band of black shading. The head and forelegs were painted on the surface outside the boss but can hardly now be made out and do not show in the photograph.

This opens up, and seems to provide an answer to, the question which every visitor to the caves asks himself, What is the reason of these curious differences in the orientation of creatures who are known normally to walk upon the ground and to keep their backs more or less level with it? This question was discussed in an interesting footnote by Count Bégonen to a paper in the *Revue Anthropologique* of 1926. He has his own theory that he expresses thus. 'In the

cavern of Trois Frères the animals on some of the walls are drawn in all sorts of directions ; some are in the normal position, others tilted to the vertical, and they pass through all angles, and even have their legs in the air. On the spot one can soon understand these topsy-turvy attitudes. They are found always¹ in narrow gullets and twisted alleys, where the artist had to take all sorts of positions to make his drawings from, lying on his back or on his side, or bent at an angle, positions it may be said that in any case we have to assume in order to see the pictures. We then discern that the animal which has been drawn has presented itself in a position parallel to the linear axis of our two eyes, and consequently the artist has always drawn with reference to his ideal horizon which might be at an angle with the actual floor of the cave because of the contorted position which the narrowness of the galleries forced him to take.'

This explanation may account for many of the out-of-the-way poses, and the real point to establish in each case is the configuration of the surface on which the artist has to work. This is by no means always a vertical surface at right angles to the floor, like the wall of an ordinary room. When the surface is of this character the general rule will be that the animal is drawn in the natural position though never save at Limeuil in parietal art with any indication of the ground under the creature's feet. But the paintings are sometimes on a roof, and sometimes on a floor, and sometimes on a sloping bank where there is standing room at the top as well as below. In these cases the position of the operator is not fixed, and he can change it at will, as a child may make drawings in chalk on the nursery floor, at one time with its face to the fire another time to the window or the door. This accounts at once for the curious variations in the positions of the animals on the Altamira plafond, and would explain similar variations in designs executed on floors, as on the floor of the cave at

¹ The word 'always' may be queried.

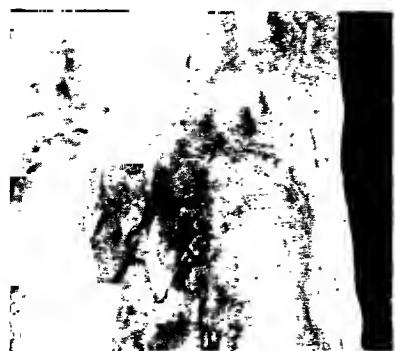


FIG. 91. Bison worked on upright stalagmite boss at Castillo.

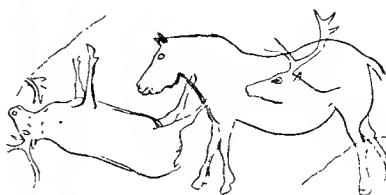


FIG. 92. Curiously placed figures in the Grotto of La Mairie at Teyjat, Dordogne.

Niaux, where the fish already shown in Fig. 77 might have been drawn from any position, as is the case with the quadrupeds on the Altamira plafond.

Drawings might also be executed on a sloping bank the top of which could be easily reached, and those animals drawn from a position on the top would appear from below to have their legs in the air. This was the case in the interesting cave at Teyjat, not far from Angoulême, remarkable for the life-like character of its well-drawn animals, and for the fact that, as will be noticed later on, there is among them a certain feeling for grouping. In looking through the published reproductions of these drawings¹ one sees animals in most extraordinary positions, as for instance in Fig. 92. The puzzle is however solved at once when the cavern is actually visited and its features understood. Along a considerable space of one of the walls there is a sloping bank of stalagmite over which circulation is quite free. The thumb-nail sketch, Fig. 93, shows the configuration of this, and it will be seen at once that an artist working above on the top of the bank will

¹ Published in the *Compte Rendu* of the 14th International Congress of Anthropology and pre-historic Archaeology, Geneva, 1912. The drawings are by the Abbé Breuil.

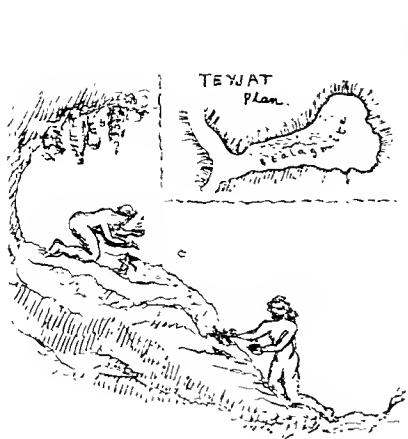


FIG. 93. Thumb-nail sketch of situation at Teyjat.



FIG. 95. Bison on wall at La Mouthe. Index sketch.

naturally draw an animal in such a position that from below it will look upside down.

These rationalistic explanations of appearances that seem at first sight inexplicable account for the great majority of them but hardly for all. There remain some that cannot in all seeming be so motived. An example occurs in the cave of La Mouthe near Les Eyzies the drawings in which have only as yet been very partially published. There is in one place a fairly smooth surface of vertical wall shown in Fig. 94¹ with several Bisons sketched upon it in incised lines. These can be made out pretty well in the photograph and are rendered more clear in the sketch kindly made by the Abbé who has lately been at work in the cave, see Fig. 95. It will be noted that the small Bison on the extreme dexter side is drawn standing on his tail, though there seems no reason material or moral for the anomaly.

There are other examples of which the same may be said,² and there is no doubt that the hunter-artists through following

¹ The dark patch is due to the unfortunate application of a coat of drying oil by an earlier explorer.

² e.g. the Bison on the dexter side of Fig. 148 (p. 226).



FIG. 94. Portion of Cave Wall at La Mouthe with incised Bisons.

the indications of natural bosses in the rock had accustomed themselves so thoroughly to deal with out-of-the-way positions that they would adopt them heedlessly or only on slight grounds. If this be the case we are justified in crediting the draughtsmen with an exceptional mastery of the forms with which they dealt, so that they could draw them from any view equally well. We also are made to realize more clearly the extraordinary attraction exercised over them by any natural appearance that suggested an animal. This marked trait in the hunter psychology is a fundamental fact that we shall see reason later on to regard as the starting point in the development of representative art.

Somewhat different from the abnormal posing is the crowding together and the superposition of the various single pictures. It is not grouping in the artistic sense of which there is any question here. How far this really shows itself in palaeolithic design we must inquire later on, but the crowding and piling together are quite distinct from anything like 'composition' in the artistic sense, and it is a puzzle why



FIG. 96. Medley of superimposed figures at Teyjat turned in every direction.

the artists who gave so much attention to the single objects and their adequate delineation troubled themselves so little about the after fate of their pictures. This chapter may end with an invitation to the reader to consider with attention the two illustrations, Figs. 96 and 97. Fig. 96 gives another specimen of the curious arrangement, or rather disarrangement, of the subjects engraved on the bank of stalagmite in the cave at Teyjat. Turn the illustration whatever way we will some of the creatures will have their legs in the air, and they are superinduced four or five deep. Yet the single figures have plenty of character and expression and are well individualized. There is nothing formal or hieratic in the appearance. Of higher interest is the other illustration, Fig. 97, which gives a portion of a 'paroi' in the great 'Hall of



FIG. 97. Part of a 'paroi' at Niaux with Bisons and other animals.

the Bisons' at Niaux, and to any one not practised in 'reading palaeolithic designs it will probably present at first sight only a jumble of irregular patches of light and shade. The light patches are stalagmitic efflorescence and the darkest lines designate the members of a group or rather medley of animals amongst which Bisons are in the majority but which includes a large Horse and more than one Ibex. In all there are, fully shown or only in part, at least seven or eight quadrupeds more or less clearly to be made out, and it is really worth the trouble to attempt with a reading glass to disentangle the puzzle. Half an hour thus spent would probably conduce to a sounder knowledge of the special characteristics of this extraordinary art than a day devoted to reading descriptions of the single pieces as they are figured in the numerous and excellent archaeological books dealing with the theme. One needs to get an idea of the *ensemble*, to imbibe in a sense the atmosphere of the marvellous place, in order to recognize the interest and the complexity of the problems presented by this phase of the culture of the remote past of humanity. Nowhere does the question of the true inwardness of it all strike home to us in a more intimate way than here at Niaux. When we have penetrated for more than half a mile into the bosom of the mountain we are enfolded in the arms of a supernatural peace, and as E. Cartailhac has phrased it 'the calm is absolute. The atmosphere and the walls have the same temperature. This is the reason why, in this balance and repose of the forces of nature, the cavern through unnumbered centuries has known no change. When we enter it our mental impressions are in the highest degree deceptive. Everything seems to date from yesterday, but everything on the contrary goes back to the quaternary age.'¹

¹ *L'Anthropologie*, xix, p. 30.

CHAPTER VI

AUTHORSHIP AND CONDITIONS OF THE ANIMAL ART OF THE CAVES: THE MAGICAL THEORY

THE next heading under the scheme drawn up (p. 101 f.) is (6) 'The authors of the drawings and the conditions under which they came to be executed : The magical theory,' and under this heading we shall find that we have to deal with two main groups of questions, one sociological and economic, the other more purely artistic, while several minor queries are included under each.

These are the sociological questions, How was all this industrial and artistic work distributed among the different sections of the primitive community? Who made and shaped so deftly and sharpened the flint implements? Who smoothed and pointed the bone heads of the darts, and cut figures upon them in relief? Whose imagination visualized, whose hand portrayed on the cave walls, the Mammoths and the Reindeer and the Bisons? The economic question is, How could all this artistic work be accomplished under the somewhat rigorous conditions of life at the time? The artistic questions of most moment are, What do these early works teach us about the nature of artistic operations in general, and especially what light do they throw on the two recognized popular doctrines, 1, that of the Freedom of Art, and, 2, that of what the Greeks called *mimesis*, the imitation of nature, as the be-all and end-all of the formative arts? We may begin with the sociological questions which are the easiest of all to answer.

There is no question that all the work with which we are really concerned, that is, all the artistic work, was in the hands

of the hunters themselves, for they only possessed the necessary knowledge of the creatures portrayed and the necessary skill of hand for giving this knowledge outward form. That the hunter made his own weapons stands to reason for only he would know what was required, and the making, in the case say of St-Acheul or Solutré flints, involved a sense of form and of finish that is really in its own way artistic, as well as a skill in manipulation that is a hunter's speciality. The case is the same as that of the chamois hunters of the Swiss Oberland. In the long winter evenings they would carve with extraordinary spirit and delicacy in a fine-grained wood the graceful creatures, whose easy *abandon* in sleep, whose tense pose of attention at a distant sound of alarm, whose headlong flight, they had learned so well to know. This is all no doubt now carried out on trade principles for the benefit of the ubiquitous tourist, but it is essentially hunter's work, a living over again of the experiences of the patiently kept ambush, the risky but successful rifle shot. The point needs to be emphasized because there still survives the old superstition that while the hunt was the part of the men of vigour and daring, it was the women or the weaklings who dallied away their leisure time in art. Whistler embodied this view in some sentences in his famous *Ten O'Clock*, in which he draws a fancy picture of the dreamer of the tribe or family who stays at home from the hunt and becomes the first artist.¹ Even as late as 1889, and at the very centre of pre-historic studies, we may judge that this was still the orthodox doctrine from what was to be seen in the Great Exhibition of that year in Paris. In the section of pre-historic archaeology, under the direction of Emile Cartailhac, there were exhibited modelled groups illustrating phases of primitive culture, including one of a Cro-Magnon family at the mouth of their cave. Fig. 98 is from a photograph of it, and we note that the hunter on his return with his game finds one of his womenkind and a lad engaged on

¹ *The Gentle Art of Making Enemies*, London, 1904, p. 139.

artistic cutting and carving.¹ This was not the way in which things were ordered in the palaeolithic household. There was of course plenty for the women and the weaklings to do in the preparation of food, and the utilization of the skins and sinews of the portions of the quarry brought home by the hunters after the last chase. The remains of charcoal on the hearths that excavation has laid bare show that fire was known and used. That the skins were employed for clothing in upper palaeolithic days is a matter of inference, first of course from the comparative severity of the climate, and then from the existence in Magdalenian deposits of bone needles deftly pierced with eyes, for none of the drawings in which the human figure occurs show it as clothed. The children may easily have been kept out of mischief by being set to perforate the shells and teeth and small stone or bone pendants, so that they might be strung together on thin catgut and used as ornaments, for whatever was the truth about clothing, the *parure*, the adornment of the person with these primitive jewels, is fully attested. In this the Paris Exhibition models are quite in order.

The economic problem is closely connected with the question of the Freedom of Art and the two must necessarily be discussed together, while the more purely artistic question of the extent to which all this representa-



FIG. 98. The Hunter's Return.

¹ Thos. Wilson, *Anthropology at the Paris Exhibition of 1889*. Washington, Gov. Printing Office, 1892, p. 654.

tive art is purely imitative will receive separate treatment later on, in Chapter x.

When attention was first directed to this pre-historic art, first on the small objects and later on the cave walls, it impressed all observers by its spontaneity and freedom and by its copiousness. It has been called a lyrical art,¹ the direct expression of the soul in a mood of enjoyment careless of all but the passing moment, and as such it was regarded as the best illustration possible of that characteristic of art called its 'Freedom.' Aesthetic theory as traditionally understood may be said to be built on the fundamental principle of the 'Freedom of Art.' The activities of art are popularly distinguished from most of our everyday human operations in that, while the latter have some intelligible motive at their back and serve some useful end, the activities of art are ends in themselves and serve no ulterior purpose of a practical kind. Not only the older writers, but those also who in our own day have adopted the modern scientific standpoint, cite the doctrine as established. Professor Grosse of Freiburg in his *Beginnings of Art*² remarks that 'by an aesthetic or artistic activity we mean one . . . which is not entered upon as a means toward an end outside itself, but as in itself the end. In this manner it comes before us as the direct opposite of practical activity which always serves as a means' to some end outside itself, and Dr Yrjö Hirn, of Helsingfors, in his philosophical work *The Origins of Art*,³ in almost the same words enunciates the standard doctrine to the effect that 'metaphysicians as well as psychologists, Hegelians as well as Darwinians, all agree in declaring that a work, or performance, which can be proved to serve any utilitarian, non-aesthetic object must not be considered as a genuine work of art. True art has its one end in itself, and rejects every extraneous purpose : that is the doctrine which, with more or less explicitness, has been stated

¹ Hoernes, *Urgeschichte*, etc., p. 116.

² Eng. Trans., New York, 1897, p. 48.

³ London, 1900, p. 7.

by Kant, Schiller, Spencer, Hennequin, Grosse, Grant Allen, and others, and popular opinion agrees in this respect with the conclusions of science.'

If this be true of art in general, it should apply to art in its early manifestations, for we are acting on the hypothesis that under simple conditions the essential nature of a thing should show itself most clearly. But is it true of art in general or of art in these early manifestations we have been considering? This question is a most fundamental one for artistic theory, and it has only really been faced in our own time since the phenomena of primitive society have been observed and discussed. Both Grosse and Yrjö Hirn cite as we have seen the old orthodox doctrine, but when they enter on the discussion of it they both adopt a critical attitude, and the former especially brings forward considerations that seem at first sight to make this time-honoured principle nugatory. As he goes on later in his book to review the facts and the conditions of artistic activity in primitive society, he proceeds to demonstrate quite clearly about all these early arts—embracing the graphic design and sculpture we have been considering, the decoration of the person and the implement in form and colour which is equally palaeolithic, as well as the dance on which a word will presently be said—that they are not in truth 'free,' in the sense of being unnecessary and serving no practical purpose, but are of essential value in the economy of primitive man and his societies, and as such are really forced upon man as part of his equipment for the necessary struggle with the forces of nature and with his fellows. He first argues *a priori* that this must inevitably be the case because these various performances, such as elaborate personal adornment or highly organized and intricate dances, involve an expenditure of time and energy that would be economically suicidal if the activities were devoid of any practical bearing on life. The non-artistic peoples would soon make a clean sweep of the artistic ones if the latter were

only wasting time in useless though attractive performances. This of course provides an answer to our economic question by showing that the time spent on art is not wasted but effectively employed. Grosse then goes on to show in detail how these artistic activities are as a matter of fact utilitarian in that they have a practical scope. They are educative, they are helpful, they make for efficiency and for solidarity. The great savage art of the dance is immensely educational, first, by giving to the individual performer increased suppleness and strength of limb, and, next, by training large bodies of men to execute continuous and elaborate manœuvres in absolute unison, according to a pre-conceived and long-practised scheme. The moral effect of this regular drill in common actions is necessarily very great, trivial as the actions in themselves may be. The whole performance must make powerfully for the solidarity of the social aggregate, and by knitting the members of it in this way together give them a practical advantage over looser aggregates the members of which have not been trained to act in common. Personal adornment, a matter for the individual rather than the community, is in like manner of practical advantage in that it enhances the wearer's status alike in his own eyes and in those of his fellows. Personal adornment of a showy, costly, or intentionally impressive kind, gives him potent aid in courtship and secures for him the favour of the most eligible bride. It aids him too in council, and most notably in war, where decorative devices are employed to exalt the personality of the highly equipped champion and to strike terror into his foemen.

On the one side therefore we have the old orthodox doctrine of the 'Freedom of Art,' which means its detachment from all ideas of practical utility, and on the other side the demonstration, on the ground of recent discoveries and observations, that the arts in early times do possess a very definite practical value. How, we may ask, can these opposing points of view be reconciled, and what bearing have these considerations on

the subject of the Aurignacian art which has been occupying our attention?

The first view, as we have seen, taken of cave art was that it was essentially free and spontaneous, but after a time the prolonged and careful investigations of which it has been made the subject led to an explanation of quite another kind, and as a result a theory that brings it under the principle enunciated by Grosse, may be fairly said now to hold the field. This is the theory that in spite of what appears on the surface we must acknowledge the existence of an underlying practical purpose beneath this showy insouciance of the palaeolithic painter and carver. This was the purpose of rendering the necessary operations of hunting the quarry more effective by a certain mystical influence which the representation was supposed to exercise over the creature portrayed. It has just been said that this doctrine now holds the field. This is generally true for France and England. It is not however universally accepted even in France. It was subjected to serious qualifications in a paper by G. H. Luquet, on 'Palaeolithic Art' in *Revue Philosophique* for 1913, and in a sympathetic review of this in *L'Anthropologie*, xxv, 124 f.. Professor Marcellin Boule emphasized the artistic character of the drawings and remarked that the magical theory is all very well for savants, while artists necessarily look at the matter from another point of view. M. Luquet's view is expressed more fully in his recent book *L'Art et la Religion des Hommes Fossiles*,¹ and M. Boule has a note developing his opinion in his well-known work *Les Hommes Fossiles*.²

English scholars generally follow the French, and Mr Miles Burkitt³ is a pronounced magician, while the late Sir William Ridgeway was almost fanatical on the same side, not disposed to admit any artistic element at all in the cave

¹ Paris, Masson, 1926.

² Paris, 1921, Eng. Trans., Edin., 1923, p. 257.

³ *Prehistory*, Cambridge, 1921.

paintings. On the other hand in Germany the contrary view is very often maintained. Moritz Hoernes to the day of his death, in 1917, never believed in the magical theory, though Dr Menghin, who brought out the third edition of the *Urgeschichte* in 1925, adopts in the main the French view. Herbert Kühn, in his book *Die Kunst der Primitiven*,¹ bundles magic out of doors in the most uncompromising fashion, and makes the drawings pure art and nothing else.

The appearances which seem to supply evidence of this underlying magical purpose vary in their degrees of cogency. M. Salomon Reinach, who in 1903 was largely responsible for the introduction of the magical theory, made much of the fact that the animals portrayed are always animals desirable for food, and to make them available for the larder was the object of the charm exercised by the representations, but to this it could at once be answered that it was only such animals that the men of the time really knew and had an interest in, so that it would only be these that they would care as artists to portray. The carnivorous beasts, the Cave Bears, and even the savage and well-armed Rhinoceros, were creatures whose company was rather avoided than sought and they would not be so well known as the others or so likely to be chosen as models. When M. Reinach first brought forward his thesis no other animal drawings were known but those of desirable beasts, and the thesis possessed a plausibility which it has lost since pictures of carnivora have come to light in the caves. Indeed the wonder is that these hostile and dangerous beasts did have their portraits taken as often as we find to have been the case. There are Cave Lions as we have seen (p. 67) as well as Cave Bears in the pictured palaeolithic Zoo, and the Wolf is not

¹ München, 1923. This writer is a 'Kunsthistoriker,' and represents Pre-historic Art as Privat-dozent in the University of Cologne. He is also the editor of the recently founded *Jahrbuch für prähistorische und ethnographische Kunst*, called for short 'Ipfek,' and may therefore be assumed to write with the caution of the archaeologist as well as with the enthusiasm of the lover of beauty. Some of his judgements on the palaeolithic art will be quoted in the sequel.

entirely neglected, for there is a figure with a fine head of him in colour at Font de Gaume. This is reproduced in colour on the Frontispiece, numbered II. These delineations are rare but they exist and are quite against the consideration M. Reinach relied on at the outset.

Another strong point of the believers in the magical theory is the location of the drawings in the remote recesses where we so often see them disposed to all appearance with deliberate purpose of a mystical kind. Again, it may be urged in reply that they are not always in the recesses but are often quite freely exposed. The plafond at Altamira is not only fully in evidence but it is situated quite near the mouth of the cave, while at Niaux, this time very far in, one of the transept-like corridors at right angles to the main gallery ends in a magnificent quasi-circular hall with a domical roof that has been treated like a *Salon Carré* of this lordly Louvre-palace of the Kings of the underworld, and its names, the 'Salle des Bisons,' or 'Salon Noir,' indicate its abundant decoration with numerous Bisons firmly outlined in black. We have seen views taken in it in Figs. 84 and 97. Cap Blanc exposed its frieze of Horses in an open shelter (p. 106), and La Grèze has almost the latter character, as it is a very shallow cave. Still, when all this is said, the fact remains that an air of concealment and secrecy does affect the caverns, or at any rate a large number of them, and the weight of evidence here is preponderant in favour of the idea of some latent purpose in the work of a mystical kind.

We have not come yet however to the really cogent consideration that makes for the theory. It is to be found in a detail, most conspicuous at Niaux, but observable here and there throughout the cavern-world—the occurrence on the flanks of the creatures sometimes of open wounds but more often of darts embedded in the flesh. An excellent example from the Hall of the Bisons at Niaux is given in Fig. 99, and others almost equally clear in Figs. 84 and 97. The darts are



Fig. 99. Bison pierced with darts at Naau.

projecting from the flanks, and the barbs which would of course be embedded in the flesh are by an easily understood convention made visible on the exterior. It has been questioned whether the 'darts' are light javelins (*assegais*) or arrows. The bow makes no appearance in parietal art, save in the special 'Capsian' form of it in Southern Spain on which some words will be said later on (p. 216), but it has been pointed out that the dart which pierces the flank of the lowest Bison in Fig. 84, as is the case also with one or two other darts, has a look of being feathered at the end. *Assegais* were however as we shall see (p. 188 f.) certainly in familiar use, and by far the majority of the painted darts have no appearance of feathering, so that the bow hypothesis has little to support it.

It has been said already that what we see here is really decisive in favour of the magical theory in its most general form. This is because it introduces an element so alien to the general character of this parietal work as a whole that it must have been forced upon it by some external influence. This statement can only be justified when we understand in what this general character consists. In the scheme of Headings on (p. 101 f.) (—) begins as follows :—'The merits and the limitations of Aurignacian-Magdalenian design,' and it can be said with full confidence that its chief merit is the representation of life. The figures are not stuffed nor made up according to patterns, but alive and individual, possessed of character and mobility, and evince, Breuil has said, *un sentiment vraiment intense de la vie des animaux*.¹ 'Die paläolithische Kunst,' writes Herbert Kühn,² '. . . ist Hingabe an das Hier . . . Freiheit, Kampf, ist das Leben selbst.' Its quality is shown partly in the forms of single animals posed in an attitude of lordly ease that have at times something quite monumental in

¹ *Cavernes Cantabriques*, p. 21.

² *Die Mäere: der Eiszeit*, München, 1922, p. 10. 'Palaeolithic art . . . is self-abandonment to the Present . . . it is freedom, it is struggle—in a word it is Life itself'



FIG. 100. Two Bisons at Font de Gaume, showing exaggerated proportions.

their aspect. This is the case with the La Grèze Bison of Aurignacian date, Fig. 49, and also with the well-known Altamira Bison, Fig. 24, marked out as the best preserved of all the noble animals on the plafond. There may lie between them a space of time measured by thousands of years, but the spirit of the work is in both cases the same, and as Hugo Obermaier has expressed it the purpose is simply 'to display the beauty of the form at rest,' a purpose, it may be remarked, exactly the same as that of the greatest of the temple statues of Greece. If these two creatures be compared it will be seen that they are different in their proportions, the earlier one being longer-legged and of more active build, while in the Magdalenian animal the artist emphasized its massiveness and made the legs quite short. Bisons however are not all of the same breed, and in the Bison pens at the London Zoo there is one of the La Grèze type that contrasts with others of the sturdier build. In many of the multitudinous Bisons in the later caves we can see the artist working towards an ideal type which his intuition has created for him. There are one or two examples at Font de Gaume where emphasis on the specialities of the type at the moment envisaged has been pushed to the verge of caricature. This is the case with the Bisons in Fig. 100 which have undeniable character though there is exaggeration in the contour of the one and in the mass of the other. Fig. 101 is a Bison at Altamira of a standard type, that possesses also



FIG. 101. Bison, fully modelled in black and white, as with the stump, at Altamira.



FIG. 102. Cervide with head turned back, on a smooth stone, from a cast at St-Germain.

much interest from the technical standpoint as the modelling seems to be carried further or at any rate is better preserved than in any other of the studies in chiaroscuro of the caves.

But life is shown too in movement and in expressive gesture, and the artist surrenders something of his effect of dignity in order to secure animation and the interest of the momentary. He seems inexhaustible in his observation of the quick movements motived by some sudden happening that makes the creature lift or turn its head ; of the action of the limbs in the walk or the canter ; and even some have thought of the breath that would issue at times in a little cloud from its nostrils. The action of turning back the head is one that a hunter must often have noticed, and he is rather fond of representing it, either as it is shown at Pair-non-Pair, Fig. 47 (p. 80), an early Aurignacian example, or as it appears in the later drawing on a smooth bit of stone in Fig. 102. The Abbé, when he published *La Pasiega* in 1913, see p. 52, knew of about a dozen examples of the gesture. Very characteristic of the spirit of the work are certain groups of animals that the artist had come across in his expeditions, and that he has rendered with an evident delight in the variety of the gestures

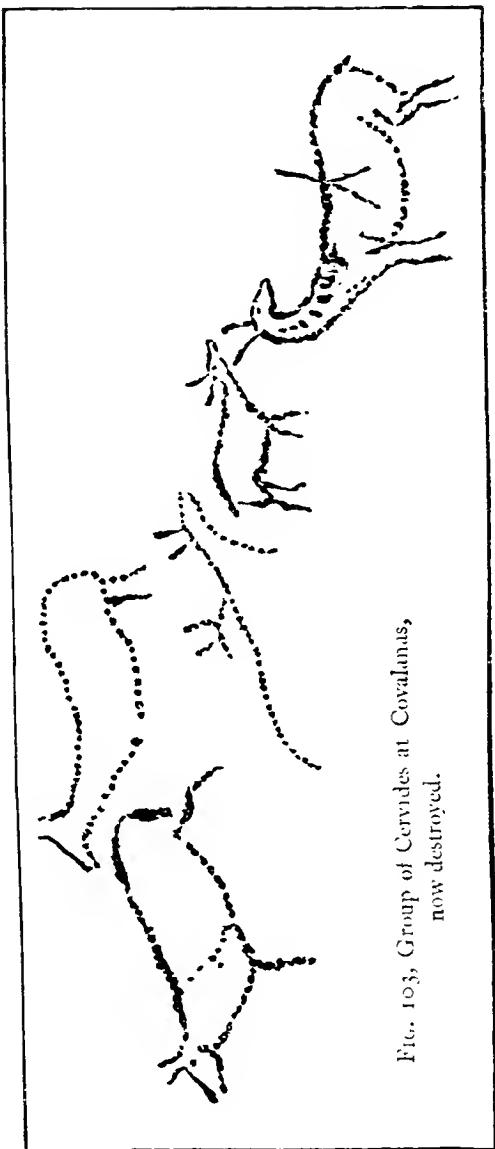


Fig. 103, Group of Cervides at Covalanas,
now destroyed.

and movements of the startled creatures. One of the best of these is a group, Fig. 103, that existed¹ in the cave of Covalanas one member of which has been already seen in Fig. 83. It is given from the Abbé Breuil's drawing in *Cavernes Cantabriques*, p. 17. He points out the excellence of the two sinister animals especially the little one with neck stretched out, and of course the foremost one of Fig. 83 in full flight. It is impossible for any one who has a feeling for art not to recognize in these animal drawings the work of genuine artists whose soul is possessed with the delight of externalizing their inner vision of the varied and expressive creatures on which all the interest of their life was concentrated.

¹ The past tense has to be used because through an almost incredible act of senseless mischief the whole group, all but the one figure of Fig. 83, has been

It has been suggested by more than one authority that the artist must have had the aid of models, and have carried with him into the recesses of the caves small studies of the animals made previously outside, possibly in a sort of artistic academy like that which has been conjectured with some plausibility at Limeuil (p. 104). The small studies of animals on smooth pebbles or objects of mobiliary art, such as that shown Fig. 102, might be brought in here, and in the Altamira volume, p. 133 f., the Abbé has noticed various suggestions which have been made about the nature and use of these studies. The one really striking fact that seems to furnish an indication of such a use as models comes from Altamira and Castillo, where have been discovered in the floor deposits flat bones such as scapulae whereon are engraved heads of Hinds, in a special technique in which the spaces within the outlines are largely filled in with shading in fine straight lines by a process called by the French 'striage,' while above on the walls of both these caves drawings of exactly the same kind make their appearance and are obviously of the same date.¹ The illustration, Fig. 104, is from an article in *Revue Archéologique*, 1912, by Henri Breuil, and it is copied by Catedrático Obermaier² who says of it 'aquellos obras de arte móvil que fueron los pequeños modelos originales que sirvieron de patrones para la ejecución de los grabados rupestres.' The facts suggest that this may have been the case but without proving it. The work is evidently all of a piece but that either phase of it represents direct copying from the other is only hypothetical, and one has learnt to regard these modern theories as to how old work was done with a good deal of suspicion. The modern antiquary, if he has had no experience brutally effaced beneath a medley of huge initials, caricatures, and other graffiti, produced by a lavish use of the smoke of lamps or tapers. The group was about the best thing of its kind in parietal art, and its loss is most deplorable.

¹ Alcalde del Río, *Pinturas y Grabados*, etc., Santander, 1906, 'Altamira' and 'Castillo.' *Cavernes Cantabriques*, pp. 171 f., 209, 217 f.

² *El Hombre F. stl*, p. 267.

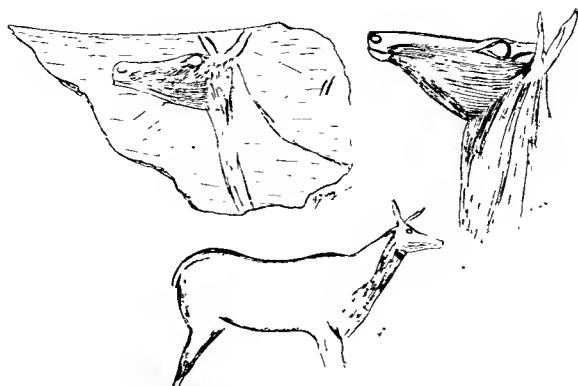


FIG. 104. 'Three Stags' heads, one on a thin bone, the others on cave walls. From H. Breuil.

in technique, will almost infallibly assume greater elaboration and a more extensive mechanical apparatus than were known in old time when methods were more direct and economical. Augusto Castellani¹ thought that the ancients disposed of materials and methods of which the secret has now been lost—a theory which is the last resort of the commentator puzzled by ancient technique. The standard English work on Greek ceramics² makes out that Athenian potters might pass their vases through the kiln as many as three times, though 'the evidence points to only one firing, after total completion of the vase.' This phrase is quoted from a valuable little technical treatise by one of the staff of the Metropolitan Museum of Art, U.S.A.,³ but the authoress herself falls into the same sort of error when she hazards the impossible suggestion that the potters made drawings beforehand of the contours they had in view for their vases, and copied them by the aid of calipers!⁴ The Athenian potter was, as his Greek name implies, a 'clay man'—not a pencil-and-paper man, nor even a char-

¹ *Deli Oreficeria Antica*, Firenze, 1862, p. 20.

² Walters, *History of Ancient Pottery*, London, 1905, I, 221.

³ *The Craft of Athenian Pottery*, by Gisela Richter, Litt.D., see p. 108.

⁴ I.e., p. 15.

coal-and-plastered-wall man, and the beautiful forms which we admire now were the creation of his hands upon the clay, each one the direct expression of his innate sense of form and his knowledge of his material. So the cave artist would deal directly with pigment or graving tool and rock surface without anything coming between them. All these roundabout technical devices are too artificial and too 'modern,' and we cannot accept them for the caves. Practice and study of some kind must have come in the way of the palaeolithic artist, but when he had achieved mastery adventitious aids would be cast aside, and what the present writer has ventured to call 'inspired rule of thumb' took control of the work. Equipped as he would be with the keen powers of observation and the retentive memory which characterize the hunter ancient or modern, he had soaked himself in the knowledge of the animals till it had become a part of himself, and, as was acutely observed by the great psychologist, Wundt, a retired position in the darkness of a cavern away from all the sights and sounds of the external world would stimulate the powers of recollection and make easier the visualization of the object, that could then be thrown rapidly and with assurance on to any surface capable of containing it. Whether that surface was rough or even, and whether or not it was already occupied by earlier designs, did not seem to trouble him in the least. The pictures as we have seen were run one into the other and superimposed in the most haphazard fashion, the one object of the artist apparently being to get the creature he had visualized put down somewhere so as to give it life and substance. We are a little reminded of the way Tintoretto seized on all the blank wall spaces of the Scuola di San Rocco at Venice and filled them with the life that glowed in the pageantry of his Saints and Angels.

Now if the palaeolithic artist was working wholly in this spirit and portraying his models absorbed only in giving them life, it would be an artistic impossibility for him even to

imagine a disabling or mortal wound that would destroy the main effect of his work. It makes an obvious difference when at the background of the work there is the fact that the chase and the slaughter of the creature were a matter of life and death to a small community inhabiting the cave. In this case the dart or the wound as prophetic of the dénouement would be a necessary detail forced upon the artist by non-artistic but cogent considerations.

This it must be repeated seems to be a convincing proof of the general truth of what has been termed the 'magical theory.' The weird notion involved in this principle is that of a mystical connection between a representation in drawing or carving and the original, a well-known item of savage belief, that we can trace all through human history not only among savages but among the peoples of civilization, through classical and mediaeval times, down to our own, for the writer was informed only the other day of the survival of the belief in the mind of an intelligent well-educated native of one of the Western Isles of Scotland. The following is from a letter to the present writer indited by a very widely travelled lady fully competent to form a judgement on questions of authenticity. 'When staying with friends near —, Dorset, we saw an old woman who, the year before, being jealous of a girl in the village who had supplanted her own daughter, tried to destroy, not the girl herself, but the fascination practised by her on the young man (her daughter's lover), by making an image of wax, with a hat on exactly like that the girl was wearing, sticking it (the image) full of pins, and putting it to melt slowly on the hearth. Our friends, who knew the whole affair, said it was apparently successful' !!

There is no need however to investigate the history of this belief as an item in the corpus of mystical formulae at which medicine-men have been at work all through human history. The view that the hunter artist would have this doctrine instilled into him ready-made *ab extra*, from the very first, and

be taught that his work owed its existence and importance only to the extent to which it followed the leading thus given, is in the nature of things impossible, for the doctrine could not exist before there were representations, and the representations were accordingly prior to the formulation of the doctrine ; nor again is the interposition of the medicine-man with his formula at all necessary, for the identification of picture and original was probably something immediate and instinctive, independent of any formal doctrine. We may reconstitute the probable actual happening by starting with a fact already established in a previous chapter (p. 77 f.)—the alertness of the men of the Aurignacian stock in discerning in accidental appearances a resemblance to the animals on which their attention was habitually concentrated. These resemblances were evidently striking, and the attraction they exercised is a remarkable fact of primitive psychology, but they were incomplete, and the sense of something wanting mingled with the apprehension of them. When this something wanting was supplied the change was electric. To the consciousness of the artist it was the creation of the creature itself. The act of making the resemblance complete brought the real thing into being and located it there, and so, it was unconsciously assumed, would every complete resemblance natural or artificial, the two, the representation and the original, becoming in a sense merged into one.

It is gratifying to the writer to find that the same idea has presented itself to M. Luquet, who is a professed psychologist. ‘C'est un fait établi,’ he writes, ‘de la psychologie de l'enfant et du primitif que la confusion de l'image artificielle avec l'objet réel correspondant. Si, comme c'est infiniment vraisemblable, le Paléolithique avait une mentalité analogue, l'artiste, qui avait fait par exemple une gravure ou une sculpture de Cheval, se considérait comme le créateur et le maître, non seulement d'un simulacre de Cheval, mais d'un Cheval véritable. Le caractère créateur de l'art figuré est le fondement

commun d'abord de son charme désintéressé pour l'artiste, ensuite de la croyance à sa vertu magique.'¹

If this be the truth of primitive psychology, can we not understand how, from the very first, when this wonderful art was first coming into being, the effigy and the original might in the way suggested be considered as one? The earliest stages in the evolution of representative art have been already traced (p. 76 f.)—the casual finger mark, the accidental resemblance, the resemblance worked out, the mental image materialized till the original is re-created as a thing of life, and now finally the whole process deliberately carried out with full intent from beginning to end. The creature was known and was remembered first as a thing of life, expressive, mobile, and as we cannot help saying, beautiful,² and as such it was constantly called into being during all the centuries or rather millenniums of palaeolithic art. Here comes in the importance of the comparatively recent discoveries at Limeuil (p. 103 f.), for these show that the life and action and graceful lines of the Cervides or the Reindeer were just as fascinating to the later Magdalenian artist as they had been to the early Aurignacian of perhaps thousands of years before, and practical considerations of another kind were just as little in evidence.

A commentary on what is here said may be found in some sentences in a recent leader in *The Times Literary Supplement* where the writer is noticing how the art of satire may begin in quite inartistic invective, but becomes later on refined and reduced to form, and so an art. The art of satire and all other arts 'properly become arts when their origins come to have no importance at all.' A certain desire, such as that of soundly rating a wrongdoer, may 'inspire some artists to

¹ *L'Art et la Religion des Hommes Fossiles*, p. 169.

² The sense of beauty was certainly being evoked in the mind in the progress of these drawings, for the artist obviously took an aesthetic interest in the graceful lines of his models. He is specially good at the line of a horse's back.

create works of art, but we may be quite certain that the desire does not remain after the artist has begun his work of art ; it has served its turn and would only be in the way after the actual process of creation has begun, though it may reappear when all is finished.'¹ Here we have, on a different theme and expressed in a different way, just what might be said about the cave artist working in perfect freedom, and without any sense at the moment of the religious or magical purpose that as a fact was the initial practical motive of his work. The motive is present to his mind before the act of artistic creation begins, and is realized after the production is complete, but the artistic activity itself, while in actual operation, is quite free and the motive is for the time in the background. The matter cannot now however be put so absolutely, in view of the phenomenon of the darts, which are certainly a proof that the initial practical purpose was not entirely ignored during the progress of the work. We must recognize the fact that, apart from the artist's delight in the living creature and in the exercise of his own newly discovered capacity for making it live anew in his representations, the all-importance of the flesh of the animal for food was necessarily in a measure present to his mind though perhaps only in the background of it, and the dead creature with its spear wounds, cut up and carried home to the cave in joints, was a very relevant fact that could not wholly be ignored.

We see accordingly that it is quite futile for certain writers to pooh-pooh the magical idea altogether as if it could not come in at all. We may read with pleasure the eloquent vindication of the aesthetic qualities of this parietal art by Herbert Kühn in his *Kunst der Primitiven*, quoted in our final chapter, but his repudiation of all the 'other considerations' apart from what are purely artistic is really unscientific. These considerations, in the form of practical motives, did exist and cannot be ignored. The picture would to the artist's mind

¹ *The Times*, Literary Supplement, June 23, 1927.

make the original materialize in the form of potential nutriment as well as of beauty.

It would be interesting to know how soon the picture itself began to give evidence of this intent. The placing of the picture in mysterious recesses did not alter the picture itself, for we can see that the situation of the work did not affect its intrinsic artistic quality. This was however modified when the fatal weapon actually appeared in the representation, for a new detail was introduced of obviously great importance. This might be expected to have some effect on the representation as a whole, imparting to the stricken creature a look of physical failure or threatened collapse. It is however a significant fact that though this does occur, it only occurs to the writer's knowledge with any approach to certainty in two or three examples, one at Niaux and one, perhaps two, at Limeuil. In all other cases the dart appears to be a mere appendage, or symbol, not a feature in intimate relation to the constitution of the object, whereas in other cases where physical weakness seems to be shown the dart or wound is absent.

The two certain examples may be illustrated. Fig. 105 is the Niaux piece, one of great interest from more than one point of view. On the dexter side is a small Bison outlined in red except at the back where advantage has been taken of a projection of the rock with the shape of a Bison's hump and croup. This was of course the starting point of the drawing and the cause of the creature's extraordinary position reared up on its tail. On the flank is a red spot that has been explained as an open wound. The most remarkable point is the treatment of the legs, which are not as in other cases of poses of this kind thrust out in their normal position in relation to the trunk, but crumpled up as if atrophied. This is supposed to signify the failure of the animal's strength as a result of the wound. This same idea is thought to be carried out by the other objects in front of the animal, consisting in groups of red dots evidently arranged with intention and one would



FIG. 105. So-called 'Rebus' at Niaux.

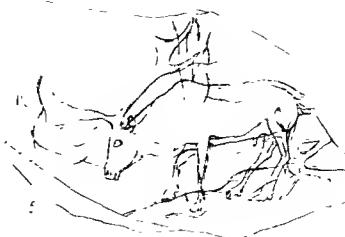


FIG. 106. Wounded and failing Reindeer, from Limeuil.

imagine with the object of conveying some idea. The same may be predicated of the Signs further on which have the form of clubs (Claviform Signs), and the whole ensemble is presented by MM. Cartailhac and Breuil as what they call a 'rebus' conveying a meaning in the language of signs. 'Alors,' they write,¹ 'notre panneau devient peut-être une page lisible où le taureau mourant, les armes qui servent à le tuer, les cercles cernant un point central, les points en bande seraient comme le schéma de la chasse, l'exposé d'un souvenir ou d'une espérance, l'expression d'un vœu.'

The Limeuil example is shown in Fig. 106. A Reindeer has upon its hind quarter the unmistakable mark of a dart and there is something in its whole attitude, the hind legs drawn in, the forelegs a little spread as if to give a broader support, the head drooping, that gives a clear impression of imminent collapse. Limeuil is just the place where we should anticipate the multiplication of details with the mystical significance which can be read into the Niaux darts, and the archaeologists who are responsible for the very interesting account of the finds are so impressed with the magical theory that to them the whole place and all the work that was carried on there seems pervaded with an atmosphere of mysticism, whereas the unprejudiced reader derives rather the impression that there was nothing thought of at Limeuil but art. As was noticed

¹ *L'Anthropologie*, xix, 1908, p. 36.



FIG. 107, Reindeer, from Limeuil. FIG. 108, Reindeer's head, from Limeuil.

on earlier pages (pp. 4, 103), the feeling of life, of variety, of expressiveness, is everywhere, and the whole set of plates in the Limeuil book seem instinctively to give the medicine-man and his formulae the go-by, and to make all that is artistically possible out of the subjects under treatment. For one thing, the Limeuil artists strike out quite a new line by introducing under the feet of the animals portrayed indications of the ground on which they stand—a complete innovation on parietal art practice that merits more attention than has yet been paid to it. The illustrations of Limeuil engravings in Figs. 107 to 112 show in many cases these lines of ground, and also give an idea of the variety and life in the drawings. These of course are picked examples, the great majority of the pieces being of less merit, and many of them consisting in a maze of lines into which it is hard to read any intelligible meaning. There is in many of the pieces a naïveté and freshness that make us feel that we are looking over the shoulder of the artist, or perhaps rather the student, at his work and can see where he is in difficulties and how he helps himself out. Fig. 107, no. 11, shows a fair attempt to sketch a Reindeer as far as its hind legs, which are in the same sort of muddle as the forelegs of the Ibex in Fig. 69 (p. 106). No. 12 is more

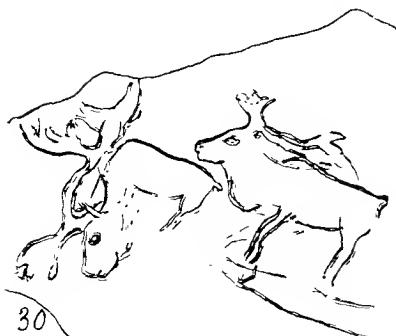


FIG. 109. STUDIES OF REINDEER
ANTLERS, FROM LIMEUIL.

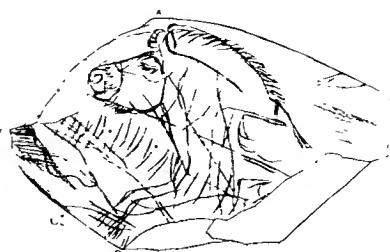


FIG. 110. HEAD OF PONY, FROM
LIMEUIL.

successful. The antlers of the Reindeer were always a trouble to the draughtsmen of the caves. Fig. 108 gives us a really fine profile of a Reindeer's head with above it a mere jumble of lines which just show that they ought to be those of antlers. Out of Fig. 109 we may evolve the idea of an ambitious but not fully trained worker who had set his heart on mastering this problem. He begins by delineating the creature on the sinister side but is dissatisfied with its horns. He then turns his bit of stone to his right through a right angle and sketches out a Reindeer's head on which he proceeds to build up a gallant composition of beam and palmettes, showing however only one of the antlers. Still, he was fairly pleased with himself and thought he would give to the head a corresponding body, but discovered what he forgot to note at first that there was no room for it because the first Reindeer stood too close. As a *pis aller* he attached to this head a body far too small for it, that just came into the space, but had no anatomical relation to the head. Fig. 110 gives an excellent sketch of the fore-parts of a Pony, great attention being paid to the hair round the muzzle and at the eye. Figs. 111 and 112 speak for themselves. The first, a herd of Deer with a Fawn in the middle, reminds us of the beautiful but far earlier group from Covalanas, Fig. 103, and there is the same variety in the actions and

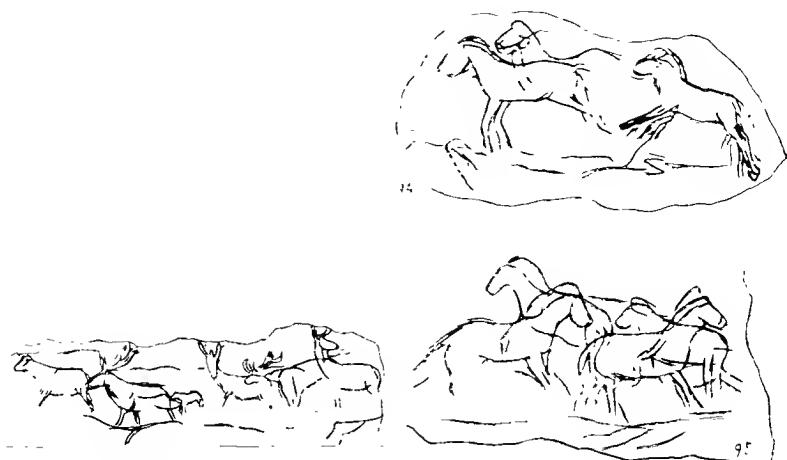


FIG. 111. Herd of Deer from Limeuil.

FIG. 112. Two groups of Ponies in movement from Limeuil.

gestures. As for Fig. 112, the two sketches are simply delightful. The lower one seems to show the Ponies running round in a ring, like horses on an old-fashioned threshing-floor only far more lively. Imagine the indignation of the austere medicine-man who caught a youthful brave taking in this easy-going fashion a task that should involve a gloomy ritual and an atmosphere of religious terror !

At Limeuil, where all the work is so late, we should expect the Reindeer and Horses to be riddled with darts, while, as a fact, out of the sixty or seventy animals on the plates that have complete bodies we notice only one, No. 5, already shown in Fig. 106, that has a real unmistakable barbed dart head with indication of the shaft, the dozen or so of other possible cases being in some instances more than doubtful. Magic is certainly in these representations not much in evidence.

The general statistics of the darts may have a word. Apart from Limeuil, we find them in special abundance at Niaux, also rather late Magdalenian, and they figure on about half the animals there. Salomon Reinach in his *Répertoire de l'Art Quaternaire* only indexes seven other places where they



FIG. 113. Woolly Rhinoceros from
Colombière, Ain.

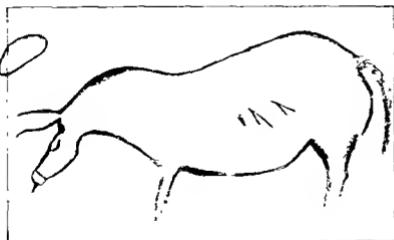


FIG. 114. Early Horse at Castillo,
with Darts in its flank.

are found, and at two of these there are only darts by themselves, not penetrating animals. Most of these places are Magdalenian, such as Chaffaud, see Fig. 23, where both the Hinds have darts in them behind the shoulder, but in the cave of La Colombière, Ain, there came to light an engraving of a Woolly Rhinoceros on stone with darts sticking in his belly where only they could find access, Fig. 113. This may be early Magdalenian. There is at any rate one example of assured Aurignacian date, according to Breuil's chronology, and this is a Horse lightly sketched in red outlines at Castillo, that is early though not of the earliest part of the period, Fig. 114. Pindal has a doubtful example. In one of Count Bégouen's caves there is a drawing of a Horse (unpublished) with about fifteen Claviform Signs superimposed over its body. The idea here is similar to that underlying the drawings of the darts. On the whole the darts are only of occasional appearance, and are always noticed as something special wherever they occur. The Castillo example is quite exceptional on account of its early date.

An endeavour has now been made to show how in quite a natural way there may have come about the idea that an accurate representation of a Bison on the wall of a cave was a pledge of the appearance of the original, and that a dart planted in a vital spot was equally prophetic. It needs hardly to be said that all this was mere make-believe, and that no real practical advantage accrued from the supposed alluring

(or really, in the thought of the time, creative) character of the drawings, but it may be answered that the people who made the drawings believed that they would, through a process that they only dimly realized, actually produce such a practical result, and this would give the hunter confidence and really help him to success. There is no doubt that we must postulate for the average human creature a real accessibility to what the philosopher calls superstition. The presence, and still more the loss, of a mascot does mean something. John Berry Hobbs, the famous Surrey batsman, explained to an interviewer that he always adjusted and strapped on his pads in a particular order,¹ and even he, the most level-headed of men, might easily find his innings spoiled if he remembered when he got to the wicket that he had put on the pads wrong leg first!

Some mention has been made of that baleful figure the 'medicine-man,' who some think was a sort of presiding genius in palaeolithic society and an autocrat in the matter of its art. It was at his bidding, these say, that the animals were painted or engraved on the cave walls, and under his direction the darts were planted in their flanks. It was the natural disposition of people of his kind to use the agencies of darkness secrecy and the unknown to impress with awe the simpler minds of their fellows, and the caves do undoubtedly present features that suggest the existence and activity of the men of mystery whose influence in later savage societies is of such acknowledged potency. Some antiquaries see in the painted caverns, or at any rate in parts of them, secret shrines for the celebration of mystic rites, among which the painting of pictures for the purpose of the allurement of game took an important place, and there is no question that impressions of the kind must be received by any one who with an open mind visits the caves and learns from all available sources what is to be known about them. Catedrático Obermaier has even

¹ *Daily Journals*, August 18, 1925.

suggested¹ that certain caves were looked upon 'as sanctuaries or as the resort of a secret cult,' and instances La Pasiega, close to Castillo, as a labyrinthine cavern parts of which 'suggest involuntarily the idea that in these hidden recesses secret rites were performed.'² He gives the evidence that the cave of Altamira had ceased to be a place of human habitation before the great paintings were executed on the plafond,³ and concludes generally that 'las cuevas franco-cantábricas con pinturas y grabados paleolíticos, deben ser consideradas, con gran probabilidad, como misteriosos lugares de culto reservados acaso solamente para ciertos grupos sociales iniciados en tales secretos.'⁴ Other authorities would hardly go so far, and there are appearances which at first sight may seem to favour the extreme view just quoted but are really susceptible of a simpler interpretation. Consider for example the figures of men with masks and sometimes with tails or horns of animals or other disguises. These may be only connected with the familiar devices of the savage hunter ancient and modern designed to conceal his approach to the quarry. This he accomplishes by dressing up as much like the animal as he can, and though there is no direct palaeolithic evidence of this practice it is really to be inferred both from natural likelihood and from the evidence of a remarkable Bushman painting in a cave near Herschel, where a hunter has dressed himself up as an ostrich. An illustration, Fig. 145, will be found further on (p. 221). Incidentally there may be noticed the possible importance of this practice in the beginnings of the representative arts, and this is referred to in the next chapter (p. 182). Dressing up in this way is a part of the routine of the hunter's life, and there is nothing mystical about it. When the imitation is carried further and the gestures and movements and perhaps the sounds of the animals are copied we come near to the animal dance, a familiar institution in the world of

¹ *L'Homme Fait*, Madrid, 1925, p. 257 f.

² I.e., p. 272.

³ I.e., p. 273, note.

⁴ I.e., p. 274

savagedom. The primitive dance so far as we know it may be said always to have a religious character, and we are brought with it into the circle of influence of the medicine-man. This is not however necessary, for at any rate at first the imitation by the actual person who transforms himself for the time into the animal is like the imitation by means of brush and graver in parietal art—in both cases there is an act of creation, and representation and original are really one. There is confusion of thought no doubt but nothing mysterious or magical such as would demand the agency of the medicine-man. Later on of course he puts in an appearance and gradually turns what was at first direct and simple into an elaborate mystical rite shrouded in darkness and hidden from the crowd.

The above is a necessary preliminary to the presentation to the reader of the most remarkable single human figure in parietal art—the famous so-called ‘Sorcerer’ of the Cavern of Trois Frères. This strange being, whom we shall find in Fig. 115, is a man partly disguised as a beast, and is by many regarded as a sort of super-medicine-man, the presiding genius of palaeolithic culture and especially of parietal art as well as of magical rites generally, and especially of religious and animal dances. In what follows it will be seen that notable as is his personality there is no need to set him on any higher throne than the one he actually occupies, as the presiding genius of a special shrine. He was found in the French cave on the estate of Count Bégouen called ‘Trois Frères.’ Here, in a remote passage of a highly ramified cavern ‘we arrive,¹ firstly, at a small alcove to the right-hand side. On entering we discover an engraving of a lion on the wall to the left. Underneath this engraving, resting on a projecting knob of rock, was found a graving tool or burin : perhaps the actual

¹ The above few sentences are taken from an article by Mr Miles C. Burkitt in *Man*, vol. xxi, 1921, No. 108. At the time of the writer's own visit the cave was inaccessible owing to the height of the water.



FIG. 115, The 'Sorcerer' of the Cave of Trois Frères.
From a drawing by Henri Breuil.

tool used by the artist to engrave the lion above. Even to an old *habitué* of the caves there is something very stirring to the emotions to find the actual tool left by the artist under the engraving he had just finished. The long lapse of time seems to vanish away ; the artist might have been there yesterday. But a little further on there are many greater marvels in store for us.' These, to put the matter shortly, are to be seen in a curiously formed rock chamber, six or eight feet wide, with smooth walls round the lower part of which is engraved a sort of frieze of animals, including with the familiar Bison, Horse and Reindeer, the Mammuth, the Rhinoceros and the Lion. Higher up, on the end wall of the chamber or alcove, partly painted and partly engraved, is an extraordinary figure of a man with his head covered with the mask of a stag the horns of which branch out above, and with the tail of a horse. That the figure is human is quite certain from the carefully executed feet as well as from the hands and other details, but it is a man disguised as a beast and his appearance opens up a vista of speculation which some may be tempted to follow.

The figure was carefully drawn by the Abbé after a hard and rather risky climb. From its nature and from the

position in which it is placed in obvious dominance over the frieze of animals below, it is clear that it is in the closest relation with these, and it can be regarded as presiding over rites which will exercise an overmastering influence of an occult kind on the beasts it is desired to enchant. It might on the other hand be taken as the figure of a leader in the imitative animal dance that as we have just seen begins at any rate in a very natural and non-mysterious device of primitive venery.

We may take it then as proved that there was in the background, as it were, of all these naturalistic paintings and carvings a practical or utilitarian purpose. According to the old orthodox doctrine of the 'Freedom of Art' (p. 140 f.) this taint of usefulness should exclude the productions from the category of works of art, but in view of their pronounced aesthetic character, a character which as we see at Limeuil was maintained in its pristine freshness for thousands of years to the end of the flourishing period of the style, this would be absurd, and the only conclusion is that some rectification of the old orthodox doctrine is now needed. If this doctrine of the Freedom of Art be not true for these earliest times the question is whether it is true at all for art in general or for art at any period. This question may have some consideration in the final chapter, where also may be noticed the kindred question of the bearing of the facts of palaeolithic painting and sculpture on the other popular aesthetic doctrine that the essence of the representative arts is their imitation of nature. So far as we have gone, one would say that the work of the artist is from the first an act of creation rather than mere copying, and upon this more may be said when this book comes to its summary.

CHAPTER VII

THE BEGINNINGS OF THE ARTS IN GENERAL, IN THE LIGHT OF DISCOVERIES IN THE CAVES AND ROCK SHELTERS

It was laid down at the outset that we should not find art in the strict sense a motor but rather a regulative influence. It does not at first set anything in movement nor directly create anything, but comes in at an after stage when actual movement and production have already begun and turns them into something artistic. We have now to inquire what forms these beginnings take, and what we mean when it is said that art 'comes in' at a later stage.

In what order the arts make their appearance in primitive times we need not inquire too narrowly, but Personal Adornment and the Dance are held by some to represent the earliest artistic activities of man, and the Decoration of Implements and other objects is closely connected with personal adornment. We can see how natural it is for this to be the case because the primitive implement is just an extension of the hand, giving it more range and power. It is really a part of the person. The formative arts would in any theoretical scheme come later, and we must recognize that the wonderful early development of these arts in the palaeolithic period which we have been studying is something quite abnormal, and only to be observed in the limited area with which we have been concerned. The Aurignacians were in this department a specially gifted people, but the geographical range of Aurignacian art was circumscribed.

It will save confusion if we take in turn each of the arts just enumerated and notice what we may call its pre-artistic stage, that is the stage of activities and productions in which

there is nothing artistic but which are as it were the raw material out of which the particular art is in each case formed. In this we need not confine ourselves to phenomena illustrated by what we have found in the caves, but must take a wider outlook.

First may be taken the subject of Personal Adornment, with which there comes naturally to be connected the Adornment of Implements.

It has been noticed (p. 72 f.) that the use of colouring matter in some way as a covering for the human form or parts of it is probably very early. It is true that Déchelette notes that for the Chelles and Le Moustier periods there is no direct evidence of the employment of colouring matters ; he adds however, 'but we must draw no conclusions from these negative indications,'¹ and the use of red ochre or red haematite in connection with early Aurignacian burials suggests that the employment of such pigments was well established. Professor Macalister believes that red pigment was purposely applied to the bones of the interred and not merely derived from contact with the earth over which red colouring matter had been spread, and he sees in this prominence given to red a symbolic intention. 'Red,' he writes, 'is the colour of living health'² and to paint it on the bones of the dead is prophetic of extended or renewed life. If this be the case the use of this significant material may be an early instance of expressive decoration in colour.

As regards decoration in form, the employment of objects definitely hung on or attached to the body and intended to be displayed upon it may, we have seen (p. 34), go back to pre-Aurignacian days. From Aurignacian times onwards such use is fairly common and quite well established as to date. The most common objects used for the purpose are shells, and the next are the teeth of animals, and both are

¹ *Archéologie Préhistorique*, 1928, p. 204.

² *Text Book*, 1921, p. 502.

found in great abundance pierced with holes obviously for suspension. At Laugerie Basse a skeleton of this epoch was adorned with a parure of sea shells from the Mediterranean.¹ The four skeletons from Cro-Magnon itself had a great number of sea shells strewn about them. At Brünn in Moravia a skeleton of the same early Aurignac date had about it no fewer than six hundred fragments of fossil shells, with many perforated stone disks large and small. At Předmost in Moravia, in a Solutrian stratum where were found the remains of eight or nine hundred Mammoths, there came to light the bones of a child that had been adorned with a necklet composed of fourteen little oval beads of Mammoth ivory. The most remarkable parure of the teeth of animals is one found in the cave of Duruthy, near Sorde (Landes), where there were about fifty canine teeth of bears and of lions that had apparently been made up into a necklet and a belt. Almost all were perforated for suspension. A remarkable fact was that a score of the bears' teeth had designs engraved upon them² including in many cases darts. The cast in the Museum at Périgueux of the famous Berlin skeleton from Combe-Capelle shows that this had round its neck a collar of small whelk-shells pierced, fifteen of which were lying about the head. Fig. 121 gives, from Déchelette, some perforated teeth and also perforated sea shells strung together for an ornament.³

The classic ground however for these bodily decorations is Mentone, where the Grimaldi caves, which are actually

¹ This fact has an incidental interest as a very early instance of commerce. These objects of fancy must have been passed from hand to hand over a considerable stretch of country. À propos of this, it has been remarked that Phoenician commerce began also not with traffic in useful commodities but with the search for a thing of taste and luxury, the famous purple dye made from shell fish.

² Déchelette, *Archéologie Préhistorique*, 1908, p. 259.

³ Copied by kind permission of the publishers, from Déchelette, i.e., Figs. 80 and 81.

over the frontier in Italy, exhibit a large number of examples. These caves, that are not deep and are more like rock shelters,

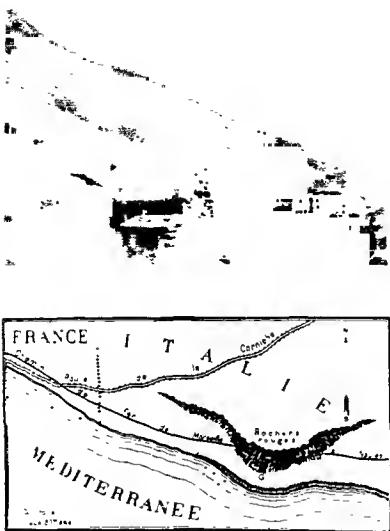


FIG. 116, Distant View of the Red Rocks from Mentone.

FIG. 117. Site of the Grimaldi Caves.

local dialect 'Baoussé-Roussé') to half its height of sixty-five feet with material in layers well furnished with archaeological relics. When this deposit was removed layer by layer a considerable number of skeletons were found at different levels from the early Aurignacian upwards. The cave of Barma Grande, the one shown to visitors, is in configuration like that of the Prince, and it has been carefully excavated in such a way as to preserve *in situ* some of the skeletons. The great differences in the levels of these are measures of chronology. Figs. 119 and 120 show, the first the upper, the latter the lower levels with the platforms, etc., for visitors, and the bodies in glass cases.

For our purpose the skeletons are chiefly interesting from their presenting so many examples of personal decoration.

open in the precipitous face of a rocky promontory that bounds the view as one looks along the East bay towards Italy, Fig. 116. Quarrying, and the construction of the railway to Ventimiglia, have destroyed some and altered others of the grottoes the situation of which is shown in the map, Fig. 117. The best of the remaining examples is the so-called 'Grotte du Prince' seen in Fig. 118. The narrow pointed cleft rises to a great height but does not go in far, and before the caves were explored it was filled like the other hollows in the so-called 'Red Rocks' (in



FIG. 118. Grotte du Prince. Grimaldi Caves.

Characteristic of the site is the abundance of minute shells of the species *Nassa* that seem to have been strung on nets used as headdresses or sewn on to vestments made no doubt of skins dressed very thin. The head of a male skeleton from the Cavillon cave here had two hundred of these adhering to it and looking as if they had ornamented a net. In the so-called 'Grotto of the Children' two small bodies of children aged about four and six had about their middles some thousand tiny shells that seem to have ornamented a sort of apron. It may be noticed in passing that these shells that must have been attached to some surface are adduced, by the side of the bone needles pierced most deftly with eyes, as furnishing a proof that garments of some kind were made and worn by the cave dwellers. These Grimaldi caves have produced other evidence of personal decoration of capital importance that we shall have to examine later on.

Not only are the actual objects used for personal decoration found in the deposits, but the similitude of them appears in

the incised or modelled representations of human figures that occur in mobiliary art. On the female figure found at Willendorf in Lower Austria, Fig. 60 (p. 96), 'a simple bracelet, denoted by strokes, decorates each forearm.'¹



FIG. 119. Upper part of Barma Grande Cave.

FIG. 120. Lower part of the Cave.

bodies had been buried. There are two famous skeletons in rather doubled-up positions shown in Fig. 123 that are ethnographically very important, but interest us at the moment because the one on the dexter side wears on the left arm two bracelets, while the man on the

¹ Macalister, *Text Book*, p. 448.

Willendorf in Lower Austria, Fig. 60 (p. 96), 'a simple bracelet, denoted by strokes, decorates each forearm.'¹ A famous incised drawing, Fig. 122, from Laugerie Basse shows what was at first taken to be the recumbent form of a woman with a Reindeer standing above her. It is now however recognized that the two figures have nothing to do with each other, and that we should regard the woman as standing. She has no clothes on, but there are distinct signs of a bracelet on the one wrist that is preserved, and of a necklet round the throat. Furthermore at Grimaldi, and to a lesser extent elsewhere, objects of parure have actually been found adhering to parts of skeletons in their original positions, owing to the adhesive nature of the clayey earth in which the



FIG. 121. Teeth and shells pierced for suspension.



FIG. 122. The Woman and the Reindeer, from Laugerie Basse.

left has rows of the small *Nassa* shells adhering to his skull.

If any reader of these pages were to ask the reason why these men and women of the cave decked themselves and their children with shells and pendant teeth and ivory beads, the answer would be a similar question, Why do our sisters and wives and daughters wear smartly trimmed frocks, and hang trinkets or jewels round the neck or at the wrist? It is a marked peculiarity of the art of personal adornment that the motive of it has remained exactly the same throughout the ages. The motive for which pictures were painted on the walls of the caves may be quite a different motive from that which influences the painter of exhibition pictures of today, but the display on the person of objects that for one reason or another attract the admiring attention of one's fellows has behind it a motive that is the same yesterday, today, and tomorrow. This motive is an increased consciousness of personality, a sense of distinction in being singled out from the mass through the possession and the display of something out of the common run of things. If this something has the effect of exalting the personality it gives a pleasurable sense of pride, and this will be the case especially whenever the objects, whatever they may be, answer to the description of trophies. Herbert Spencer suggested that the



FIG. 123. Two Negroid Skeletons from Grimaldi Caves, near Mentone. From Dr Verneau.

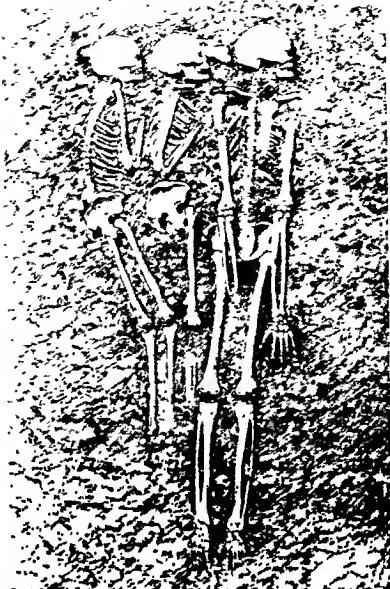


FIG. 124. Three Skeletons at Barna Grande. The Dexter one wore the Necklet. From Dr Verneau.

first form of personal adornment might be the trophy, and Hoernes is by no means opposed to this,¹ though he gives value to other suggestions that are too numerous to mention here. In the hunter life a trophy of the chase, consisting perhaps in the scalp or the teeth or claws of a slain beast, or even a smear of his blood upon chest or forehead, is a very natural thing to be exhibited by the returning brave, and at once wins for him the regard of his fellows. Breuil makes the suggestion that the hunter might have drawn on weapons or implements animals' heads or claws to perpetuate the similitude of such trophies of the chase,² and we may remember that Herakles in the East Pediment from Aegina wears as headpiece the scalp of the slain Nemean lion. It is just the same in our own more prosaic days. In the shires the first

¹ *Urgeschichte*, etc., p. 20 f.

² *Altamnia*, p. 132.

lady in at the death of the fox has, or used to have, the brush handed to her as a trophy and carried it home tucked under the strap of her side-saddle. *Punch*¹ had not long ago a picture of a young lady fainting on a Scottish moor because the keeper had 'blooded' her by a dab on the cheek as a trophy of her success in killing her first stag. If the pendant teeth of bears and lions just noticed as worn by a palaeolithic skeleton were a trophy of the actual chase, the sea shells from the Mediterranean, which adorned a skeleton in an inland cave of Western France, would be objects of value of another kind, peaceful trophies of commerce, rare, exotic, and correspondingly prized, and may be compared with the jewels of worth with which a modern lady of the Court bedecks herself. In every case ancient or modern personal adornment of the kind confers distinction, and is not only the cause of a reflex emotion of pleasure in the consciousness of the recipient of the honouring regard, but as we have already had occasion to notice was in old days of a positive practical advantage in that it gave to the individual attractiveness in courtship, weight and dignity in the councils of the tribe, and a formidable aspect in war.

It may be repeated—the important point is the pleasure caused by the enhancement of the sense of personality. It may be a purely individual affair like the display of a trophy, and the modern parallel to this may be, what one mentions with all respect and honour, the warrior's military cross or medal. Or it may be an outward sign of membership of a particular body or community, and the wearing in modern life of an official dress or uniform or of club colours is the same thing as having in primitive time the tribal totem tattooed upon one's breast. Lastly, as an extreme example of this continuity between old and new, we may take the fashionable lady's diamonds. There is nothing aesthetic about a diamond cut into facets. Apart from the accidental fact of its being of extra size and so very valuable it makes its

¹ August 26, 1925.

sole appeal by its glitter, and this is not aesthetic at all, for this appeals to the animals, who are now recognized as devoid of that sort of aesthetic appreciation which we show when we delight in the colours of a ruby or a sapphire. These flashing diamonds upon the real or camouflaged fine ladies of our sophisticated modern society are really reclaiming our old traditional kinship first with the savage, for Grosse has noted that there is hardly any quality which contributes so much to the decorative effect of an object in the eyes of primitive men as brightness,¹ and then with the animals, for animals are notoriously attracted by glitter.

But without searching for other illustrations we may take the main principle as established that personal adornment has the effect of singling out the wearer of it from the mass of the people who stand around, and giving a certain consciousness of being somebody special. This means some form or other of personal distinction, and the result on the mind is a pleasurable sense of pride, quite apart from the practical advantages which personal distinction secures.

A useful illustration or hint may in a matter of this kind often be supplied by the modern novelist, whose business it is to make his characters do or say really characteristic things. Here is a sentence or two that comes in just to the point :—
'As they came out of the shop, Betty, holding her hand in such a position that the sunlight, falling on the jewel at the right angle, brought out its almost dazzling beauty, said in a hushed voice, "It's the loveliest ring I ever saw. It makes me feel quite different to be wearing it—a kind of queer uplifted feeling."

“Then it ought to do you good,” said Bobby.’²

The Decoration of the Implement is motived by the same

¹ *Beginning of Art*, p. 103.

² *The Buried Ruby*, by Edgar Jepson, London, Jenkins, 1925, p. 298. That animals may feel and express the same sense of a ‘heightened bodily consciousness’ when possessed of some showy pendant object is shown by W. Kohler, *The Mentality of Apes*, London, 1925, p. 97.

sort of feeling as prompts the individual to exalt his own personality by displaying some mark of distinction. The implement is his own and this in itself gives a high value to it in days when such things were relatively few and as a consequence prized. The feeling grew to affection when it had served him long and well and to gratitude when it had won its master fame and often saved his life. It came to be his *alter ego*, bone of his bone and flesh of his flesh, and would win to a personality of its own. How magnificently Shakespeare expresses this personality through the mouth of Othello who comes forward with a sword in his hand at the crisis of his fate—

'I have another weapon in this chamber ;
It is a sword of Spain, the ice-brook's temper.

A better never did itself sustain
Upon a soldier's thigh.'

Now the regard of the owner for the prized possession which has exalted his own importance expresses itself first in his care for its configuration and finish as bearing on its usefulness, and next for its aspect which is to be primarily expressive of its purpose and function, and as a secondary purpose is to give it an aspect pleasing to the eye through the regularity and purposeful appearance of the marks of fabrication. The relation of owner to possession and the character and function of the artifact may be further expressed by ornament. Ornament enhances the apparent value of it and also its owner's regard for it, and may be so chosen as to explain and emphasize the nature of the object while it at the same time interprets and calls attention to its form and structure. Here also, as was the case with the finger marks in the clay, an accidental appearance due to some technical exigency may be taken as a hint and worked out into an ornamental motive.

Let us take now the Dance and Music. These are in

their origin closely associated, and they begin in movements and utterances innocent of any artistic pretensions. To avoid prolixity, we may take three obvious origins for the dance and ignore others that might be suggested. It may have a purely physical origin as when an overplus of bodily vigour demands relief in the actions of running, jumping, or capering about, possibly with the accompaniment of shouts and cries. This is a phenomenon common among sundry animals as it has been common among men in all ages, but, as Yrjö Hirn has remarked, 'it is impossible to see anything artistic in the spectacle of a man leaping or shouting for joy.'¹ The other two origins are not physical but of a kind that may be called ceremonial. There has been noticed already (p. 165 f.) the performance familiar among men in the hunting stage in which the appearance and movements of the animals of the chase are imitated by disguises and mimicry. Such imitation certainly leads on to the more formal and mystical animal dances of which we have many travellers' accounts. Ceremonial dances may also begin in the gestures

'Of woven paces and of waving hands'

that are designed to exercise some magical influence on unseen powers, and that may naturally be accompanied by cries or chants of mystical intent.

For the sake of simplicity we may take the dance as beginning in gesture or the free play of the limbs. It is well known that the dance is among savage peoples of today the principal form of art, its only competitor being the art of personal adornment. As Grosse remarks, it is 'the most immediate, the most perfect, and most efficient expression of the primitive aesthetic feeling.'² We may at the same time say of it, what was noticed in the case of personal adornment, that certain elemental features underlie it that are the same for all time. It is not only an effective expression of primitive

¹ *The Origins of Art*, Lond., 1912, p. 87.

² *Beginnings of Art*, p. 207.

feeling but of emotions that await to be stirred in the nature of every normal being of times old and new. Here the modern novelist will again help us with an illustration. In Mr John Buchan's well-known extravaganza, *John Macnab*, here is how the youthful heroine reacts to an emotional stimulus, p. 109, 'The cart descended with many jolts to the neighbourhood of the Stag—Janet dancing in front of it like an Israelitish priest before the Ark of the Covenant' ; p. 119, 'Colonel Raden and his daughters stood watching the departing archaeologist, and as his car vanished among the beeches Janet seized her sister and whirled her into a dance. "Such a day," she cried, when the indignant Agatha had escaped and was patting her disordered hair.' Nor is any special cause needed to produce the movements that are the raw material of the dance, because these may have an origin to all appearance purely physiological, for, p. 80, 'her' (Janet's) 'morning walk was wont to be a scamper, a thing of hops, skips, and jumps, rather than a sedate progress ; but on this occasion, though two dogs and the whole earth invited to hilarity, she walked slowly and thoughtfully.'

The activities of the arts of form have bulked largely among the phenomena which, as facts, we have already had before us, and we have seen in the caves one way at any rate in which under certain special conditions Sculpture and Painting may have their first beginnings. No one can however pursue the study of artistic origins without soon coming to see that not only do the different arts spring up from divers roots and develop in various fashions but that each single art may have more than one possible origin.

In the case of Painting and Sculpture there is a distinct motor influence, more powerful than any other, in the instinct of imitation which man shares with the beasts. M. Marcellin Boule, when repudiating the idea that magic can explain the first inception of the formative arts, says that 'true palaeolithic

art . . . to begin with, is realistic only. In its real . . . beginnings art' (real formative art) 'is only a special manifestation of the general spirit of imitation, already highly developed in the apes.'¹ We all know that most or all of these and also the young of the human species take obvious pleasure in the practice of acts of imitation, and modern psychologists, in the disagreeable terminology some of them affect, talk of the 'herd instinct' and compare men in societies to a flock of sheep or a pack of wild dogs that follow each other unquestioning, so that Karl Groos, in his notable book *The Play of Man*,² notes that in man 'the imitative impulse is an inborn faculty resembling instinct.' The pleasantness of imitation is noticed as a philosophical truth by Aristotle, who in the *Rhetorik*,³ refers to the delight caused by a piece of good imitation, noting that the thing copied need not in itself be interesting, but when we compare the copy with the original and discern the one in the other, the discovery of the likeness is highly pleasing. While primitive man is still in the hunter stage one form of imitation is distinctly forced upon him, and this is the act of camouflaging himself as an animal in order to approach another of the species without giving an alarm, a process we have already noticed (p. 165 f.) as at least hinted at in some palaeolithic paintings and tellingly portrayed in the Bushman's ostrich picture. Professor Breuil has suggested that the arts of modelling and painting may have had their beginning—not their only beginning, but one of the sources from which they drew their origin—in the use of a little clay and a little colouring matter to fill up here and there and make more complete the concealment of the person in the enveloping skin. This would familiarize those concerned with the plastic qualities of clay and with the use of pigment for purposes of imitation. Such imitation would have of course a practical and not an aesthetic intention.

¹ *Folk Men*, Eng. Trans., Edin., 1923, p. 257, note.

² London, 1901, p. 375.

³ i, ii, 23.

Another of the possible origins for the graphic art in a utilitarian act is the following. A well-equipped ethnologist and explorer, Carl von den Steinen,¹ believes that the drawing made to convey information is really the oldest form of the representative arts. In his account of the hunter tribes in the heart of South America he notes how a native who wishes to convey to another the idea of a particular animal imitates with his voice the creature's characteristic sounds and with his body its movements, and will also draw in the air with his finger distinctive details such as ears, horns, etc. Whenever this procedure does not produce its effect, he will make a drawing with a stick upon the earth or in the sand. The author considers that this informative drawing is older than other kinds of drawing of an ornamental kind, and he adds what is for our present purpose a remark of the utmost significance, to the effect that 'the pleasure which the imitative display brings with it, a pleasure that is the basis of all later development, is beneficially active to a certain extent from the very beginning, for the bodily gestures are the more lively in proportion as the object which is being visualized in the native's mind excites his interest.' Von den Steinen's remark is quite unconnected with any aesthetic theory, and merely implies that interest in the animal thought of makes the imitative gesture more intense and expressive, and will also make the subsequent drawing more lifelike because of the pleasure felt in delineating it. It contains however for the purpose we have in view some pregnant suggestions. The acts described have a purely utilitarian object, but in the performance of them an element of interest and of pleasure comes to be involved, and this reacts upon the agent who has got more from the performance than the prosaic satisfaction at having made his meaning clear to his companion. He feels the pleasure of which Aristotle spoke, and this pleasure is

¹ *Unter den Naturzukern Zentral-Brasiiliens*, Berlin, 1894, Kap. x.
p. 243 f.

accompanied with an inner sense of pride in his own achievement as a creator.

Taking the desire for food as indicating another motor force for the production of the cave drawings, we have at the basis of them a purely utilitarian purpose, but the fact that the production involves an act of creation, and that creation, by the pleasure its accomplishment brings with it, stimulates the self-consciousness, and makes the performer a brighter and a happier being, is a consequence of considerable moment.

The various motives or rather motor forces which we have now seen in operation in the initial stages of artistic activities are in themselves in no way artistic. They may be merely physical or spring from some instinct such as that of imitation, or may be connected with some practical end like the procuring of edible beasts for food, or some social act such as the desire to convey information, though the directly resultant activities are not activities of art. But personal adornment and decoration, the dance, sculpture and painting, are all arts, and as arts have throughout history exercised a potent influence in human society. They are activities which give pleasure often of an intense kind both to the agent and to those who witness the result, and make an appeal to some of the highest elements in human nature. How and when did these activities assume the artistic character which has always, save at the very first, belonged to them?

What comes in is a controlling and regulative influence, not one that itself directly urges or inspires. The impulses we have just noticed, impulses to imitate, to express by gesture, to throw off an overplus of energy, to show that one possesses something of value or of the nature of a trophy, lead in each case to appropriate acts, and for the reason that they are found to give pleasure these acts are repeated. In the course of the repetitions there comes in this new regulative element that turns these appropriate acts into manifestations of art. Let

us see what happens in the case of the activities which have been briefly described in the last pages.

Personal adornment may be taken first.

In the trophy form of personal adornment something belonging to the prey may at first be simply carried or waved about, but at home in the cave the women and elder children would be set to perforate the teeth and boar tusks, and to string them on a cord made of pre-historic catgut, when they could be worn round the neck or arm or below the knee as a permanent sign of triumph won.

We are faced now by a fact that is of the utmost importance for early human culture. The women may at the outset string together the teeth and tusks just anyhow as they happen to come, but the hunter will not wear them long or even perhaps wear them at all like this. He will, he must, have them arranged in a certain order, according to their shapes and sizes, with perhaps a big boar's tusk as a centre, and the largest of the other objects nearest on each side, those a little smaller coming next, and so on, or perhaps a small one or an object of a different kind introduced in between the larger ones. That this is not imaginary is sufficiently proved by Fig. 125 which represents a portion of a necklace that was found in the Grimaldi cave called Barma Grande, and is certainly of palaeolithic, though of late palaeolithic, date. The explorer of this particular stratum of the cave deposits, Dr Verneau, the present head of the anthropological laboratory attached to the Museum of Natural History, Paris, describing the youthful male skeleton, the dexter one of the three shown in Fig. 124, writes,¹ 'in freeing the skeleton . . . I remarked that it had been accompanied by numerous articles of parure. I noted carefully the position which each of them occupied, and I was able to give a distinct account of the way in which they were disposed. The skull was covered with vertebrae of fish and perforated Nassa shells, and on the forehead were

¹ *Les Grottes de Grimaldi*, Monaco, 1906, T. II, Fasc. I, p. 34.

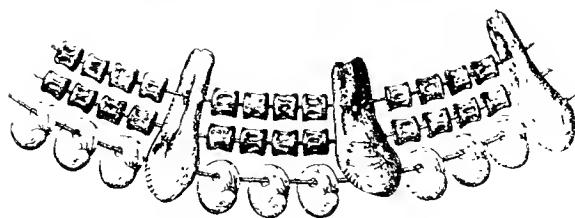


FIG. 125. Portion of necklet from Barma Grande.

several pendants of hemispherical form. In certain parts there was a deposit of clay which in combination with the layer of red haematite in which the body was laid had formed a sort of mantle over the objects so as to retain them in their primitive positions. It is due to that circumstance that I was able to ascertain the arrangement of a pretty (*joli*) necklet composed of fish vertebrae, of *Nassa* shells, and of perforated canine teeth of deer.' The description which follows is rendered unnecessary by the illustration, and the reader will note that, homely as are the objects thus disposed, the ordering of the necklet is well thought out. There are three elements of different sizes and shapes, the largest are teeth of deer, the next sea shells, and the smallest are the vertebrae of fish of the salmon tribe. The combination of one large, three middle sized, and four small units makes up a single group, and this is repeated regularly again and again. The piece is thoroughly artistic and could not be better of its kind.

This assurance by a scientific explorer that the *arrangement* of the objects composing the necklet as well as the objects themselves could be vouched for as original, is of special importance because it is so exceptional. The modern jeweller would view the piece with complete indifference because the elements that make it up are not diamonds and sapphires, but to us, from the present point of view, the whole interest of the thing resides in the arrangement, for it is in this that the art comes in. The arrangement means the establishment of those relations among objects that makes it competent for them to produce an aesthetic effect, and what we should like

to know is when this establishment of relations, this 'pattern making' to use a popular expression, first shows itself. The Grimaldi necklet is late palaeolithic and is obviously a rather advanced example of this pattern making. It is pretty clear that this must have been preceded by numberless simpler examples of the same form of art. Many such simpler examples are figured in the numerous books dealing with the palaeolithic period, and in foreign museums, Paris, St-Germain, Toulouse, Périgueux, etc., there are exhibits showing skeletons or portions of them with these adornments upon them, but we are never assured that the shells or teeth or other objects were actually found in the relative positions in which they appear in the Museum cases or on the pages of archaeological books. There was mentioned on (p. 35) an exhibit in the Museum of St-Germain of a string of fifty small fossils perforated and strung together in accordance with their different sizes, though as a fact the Museum authorities state that the objects were found scattered anyhow in the early deposit, and this will no doubt very generally have been the case, but it is significant that those who arranged the Museum cases must have been forced unconsciously to themselves to dispose the objects in an order of this kind, thus testifying to the instinct for artistic arrangement which we can assume to have been at work from the first among the artistically endowed Aurignacians. Hence there is a little feeling of uncertainty on this point, vital to us, but apparently passed by as of no importance by the scientific antiquary. Dr Verneau has not given any comment or criticism on the Grimaldi necklet except calling it 'pretty,' though from our point of view it is a piece of the first order. Nor in his enumeration of other examples of parure on the Grimaldi skeletons does he ever call attention to any simpler examples of this artistic arrangement that would lead up to his pretty necklet. The difference between mere stringing together, which is not artistic, and a pattern where there is balance and alternation

and contrast, simple though that pattern may be, is from the aesthetic point of view all-important.

In this matter we can derive instruction and assurance if we transfer our attention from personal adornment by these mobile objects without fixed arrangement to the Adornment of Implements on which patterns when once made remain fixed and have come down to us as documents of irrefragable authority. We may deal first with the patterns in themselves, leaving for after consideration the more complicated question of the relation of the ornament to the character and form of the object on which it is placed. The class of objects best suited to illustrate the point before us are certain implements of bone found in the floor deposits and belonging to mobiliary not parietal art which does not come in here. Most of them are pointed bones that formed the heads of light javelins or assegais and are called in the French books 'Sagaises.' Other objects of somewhat similar size and shape may have been pins for fastening the hair, and there are also long narrow slips cut from larger bones and used for various purposes. Together these objects furnish us with a pretty complete repertory of the simpler forms of geometric ornament, beginning (after casual strokes) with plain lines side by side, and advancing to arrangements more like the Grimaldi necklet of Fig. 125. Chronologically speaking, the development of the geometric ornament is Magdalenian but it begins in the simplest forms even before the Aurignacian era, if the Abbé Breuil is right in interpreting as designed certain incised lines on Mousterian objects of bone found at La Quina and La Ferrassie, Fig. 12 (p. 50). The objects are implements of the rudest kind made from bones used in connection with cooking. The flesh had been stripped from the bones with sharp-edged flints and these had sometimes made accidental scores on the surface, like the accidental finger marks on the clay of the caves. These were noticed and repeated deliberately with some regularity, and are the beginning of geometric

ornament.¹ In the Aurignacian period bone implements carefully made and resembling the later assegais make their appearance, and on these and other objects of bone lines deliberately incised are found. The late M. L. Didon of Périgueux, in his Report on the excavation of the middle Aurignacian Abri Blanchard, near Sergeac, Périgord,² figures a number of pieces, but they can hardly be said to show even the beginning of a pattern. Common directions for simple lines are either along or across bone objects like pins for the hair, and they have been explained as originating in technique. The process used for cutting out strips of bone from a larger piece was scoring lines with a flint point deeper and deeper along each side till the desired piece was detached, and these same straight incisions not carried through were later on used as ornament. Lines drawn round and round a cylindrical object are suggested by cords bound round the end of such an object to prevent splitting. Another technical origin for such lines can be found in the necessity for roughening surfaces that have to be handled, or have to be joined together by splicing, in order to reduce the chance of slipping. Irregularly scored lines effect this. *Altamira*, Fig. 171, 1, gives an example. Fig. 126 (5) shows a curved hair pin (?) almost covered with these plain transverse lines, while later Magdalenian pieces, in Figs. 129, 130, show the deeply scored vertical grooves. Fig. 126 (4) is irregularly marked with rhomboidal forms. A comparison of Fig. 126 (2) and (3) is instructive. In the first, diagonal lines are drawn obliquely in irregular spacing over the piece which is oval in section, while in (3) similar lines are grouped in double sets of three strokes each with an interval between. After a longer interval the same group of two sets of three lines each is repeated, and the arrangement is carried on all down the piece. This at

¹ H. Breuil, 'Les Origines de l'Art Décoratif,' in *Journal de Psychologie* for 1926, Paris, Alcan, p. 367.

² Périgueux, 1911.

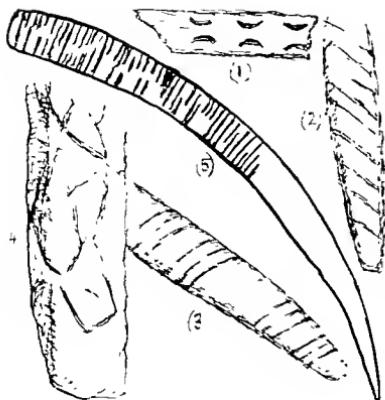


FIG. 126, Ornamented bone objects from Toulouse Museum.



FIG. 127, Bone objects with geometrical ornament in Toulouse Museum.

last is artistic, and is a pattern in which there is not merely regular repetition but the repetition, with intervals, of complex units. Fig. 127, from specimens from Marsoulas in the Museum of Toulouse, gives below on the sinister side irregularly scored lines, while above on the dexter side is a quite advanced pattern seen better in Fig. 128 (1) where on a long piece with a pronounced camber rectangular panels are marked out by double rows of incised dots and in each is an incised St Andrew's Cross. This use of rows of incised dots is seen on another piece from Marsoulas, Fig. 128 (3), where the devices filling in the panels are more florid. The motive of the small crescents in rows occurs in Fig. 126 (1) from Mas d'Azil. Fig. 128 (2) (4) and (5) are from a series of plates, numbering more than a dozen, that illustrate a paper read by the Abbé Breuil at the Geneva Anthropological Congress of 1912. They exhibit a large collection of varied motives but



FIG. 128. Patterns on bone objects from Marsoulas, etc.

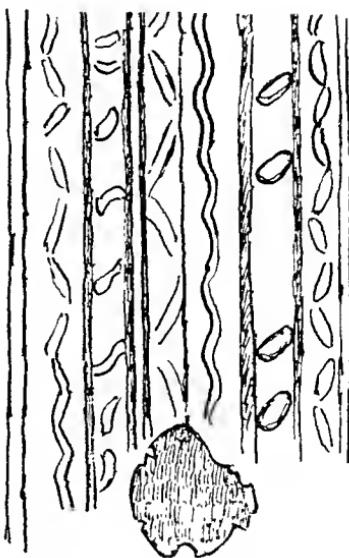


FIG. 129. Ornaments on Assegais at St-Germain.

nothing that need detain us, for Fig. 128 (1) gives us in a very effective shape the element of arrangement and composition, of alternation, of the balancing of one element against another, which is art. It is again as we have seen the establishment of relations.

A word must however be said about the more elaborate and outré devices on some of the bone pieces such as Fig. 128 (2) (4) and (5). They might be quoted as evidence for the doctrine of degeneration, for they do certainly look as if the representation of natural objects underlay them. Many students of ornament are of the opinion that what we call linear or geometrical patterns are always in truth the conventionalized representations of something in nature, that has been copied and re-copied so often that it has lost all similitude to the original. That this process of degeneration actually goes on and explains very much is of course undoubted, and we have seen possibilities of it in the Mas d'Azil pebbles,

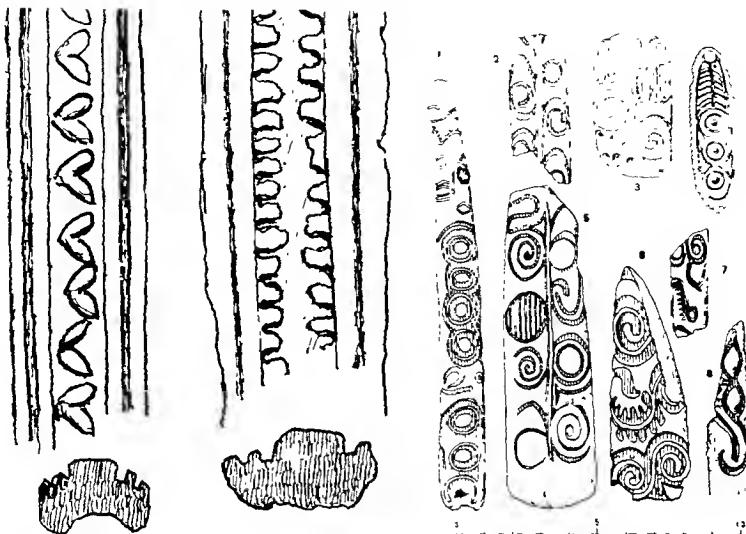


FIG. 130. Ornaments on Assegais at St-Germain.

FIG. 131. Spiral Ornaments on bone. From Déchelette.

Figs. 20 and 21 (p. 57). The adherents of the theory often however carry it too far. In the article on the Origins of Decorative Art referred to above (p. 189) and at p. 372, the Abbé tells his readers that he formerly regarded these conventional patterns of early Magdalenian origin as having been arrived at by a process of degeneration from drawings founded on nature, but as his knowledge of the history of Magdalenian art went deeper he had come to recognize the early origin and the independence of an irreducible stock of original geometrical designs, that existed and developed quite apart from the great naturalistic art of the caves. 'A large number of strips of bone of Magdalenian date,' he writes, p. 373 of the article, 'present very rich schemes of decoration obtained by the grouping of geometrical motives, ellipses, spindles, dog-teeth, chevrons, scrolls, with the happiest effect.' Examples of this later Magdalenian ornament can be seen in Figs. 129 and 130. The objects are assegai points (*sagaies*) and a cross section of each is given below while above is the

ornament unrolled. The deeply scored vertical lines bounding the different fields are a marked feature and give a look of decision and style to the whole scheme.

With regard to the spirals, Fig. 131, the Abbé at first regarded these also as cases of degeneration from the portrayal of natural objects such as the horns of Bisons, but more recently his views have been somewhat modified and he recognizes that the spiral motive has had in all probability more than one origin.¹ The source and early history of the spiral is of course a notoriously difficult theme, and one that cannot be pursued here.

¹ *L'Anthropologie*, xxix, 1918, p. 120.

CHAPTER VIII

THE SAME SUBJECT CONTINUED

THE geometrical ornament we have had before us is displayed upon simple objects which were sometimes apparently not even things of use, and tectonic questions such as that of the relation of ornament to structure do not come into view. The ornamentation of other objects of a complex form and of greater importance to life introduces further considerations that were briefly referred to before (p. 93 f.). In these cases the principle of relation is of fundamental importance, for when the object is a unity made up of divers parts each of which has its own special place and function, ornament should do more than just make the thing look nice. It should if possible explain and emphasize the purpose of each part and the place it occupies in the organism of the whole piece. Now there are one or two complex implements used by the palaeolithic hunter which were apparently singled out for the purpose of receiving special ornamental treatment. These are (1) the Arrow-Straightener, (2) the so-called 'Bâton de Commandement,' and (3) the Throwing-Stick. Many would see no difference between (1) and (2). In both cases there is a length of beam of stag horn with at one end the beginning of a tine or tines. Where the material has thickened for the joint the antler is pierced with a round or oval hole about an inch or so in diameter. When there is no branch or only the beginning of one and a plain stem below less than a foot long, the interpretation 'arrow-straightener' would seem very natural, as we know that implements of this kind are habitually carried and used by savage hunters of today such as the Eskimo, and



FIG. 132. 'Bâtons de Commandement,' etc., at St-Germain.

the hole would be a necessary detail. A simple example of upper Magdalenian date was shown in Fig. 58, 2 (p. 94). It has along it a specimen of the very rare phyllomorphic or plant ornament noticed previously (p. 93).

When the implement has the two tines developed to a certain length, and as is sometimes the case two or more holes instead of the one, the piece assumes a greater importance, and all sorts of explanations have been offered of it. We need not enter into these but may adopt the common French term 'Bâton de Commandement,' which would make it a sort of sceptre or rod of authority carried by a chief. A collection of them in one of the cases at St-Germain is shown in Fig. 132. All that concerns us is the fact of the piece's importance, for this seems to be attested by the ornament which is very commonly lavished upon it. This ornament testifies to the

regard in which the object was held, and the choice of it, in almost every case the animals of the chase, signalizes its connection with the dominant interest of the community. All this stands to reason, but it is not so obvious, and is worth a question, whether the ornament is in any marked degree disposed in relation to the shape of the object. It is common enough to find the tines, or the knobby part of the horn where the tines would be given off, worked into heads of animals or other shapes that had evidently been suggested by accidents of the natural form of the antler. A specimen from Placard of old Magdalenian date, from a drawing by Breuil, is given as no. III on Fig. 133. It looks like an arrow-straightener. This practice however we have learnt would be inevitable, and for the present purpose has little significance. In the case of one Bâton figured in the work of MM. Girod and Massenat¹ each of the two tines is worked into the similitude of a phallus, and it may be mentioned here in passing that representations of male and female organs do occur carved on stone in some of the Museum collections, as at Périgueux and Les Eyzies, while a number of the curious and enigmatical semi-disguised human figures are ithyphallic, but the proportion of such things to the works of art as a whole is infinitesimal, no more in proportion than would be found to be the case if we examined with the same intention the whole collection of extant Greek vase paintings. Apart from these bits of naturalism, it cannot be said that the animal and other representations on the Bâtons take any account of the special form of these objects—they are simply disposed without any adaptation wherever there was a place for them. On the other hand the holes in the implement *have* engaged the artist's attention and are emphasized by a simple but effective treatment, being sometimes surrounded by incised lines the artistic intention of which is the same as that of the mouldings of a Gothic arch, the actual form being repeated by a border

¹ *Les Stations de l'Âge du Renne, Laugerie Basse, Paris, 1900, Pl. I.*

that follows its outline and gives it accent and importance. Fig. 132, the Bâtons from the Museum case at St-Germain, shows more than one example. Both straight lines and curved are used in this way for bordering the orifices.

The third object under consideration has more of interest to offer, and shows distinct evidence of that particular artistic process of decoration which consists in adapting with necessary modifications the forms of nature so that they come into proper relation with the object which is being adorned. This third object is the so-called 'Throwing-Stick,' in French 'Propulseur,' a device for increasing the force behind a javelin when launched at a quarry. This is effected by an artificial extension of the length of the arm. The 'fist-flint,' as we have seen (p. 38), increases the efficacy of the fist, the first of all human implements or weapons, by making it heavier and harder for a blow and enabling it to cut or pierce. So too with the Throwing-Stick. The javelin in the ordinary throw acquires its stock of momentum from the sweep of the arm through an arc of a circle before the dart is loosed from the hand. The implement doubles the length of the arm and with it the radius of the arc of the circle and the missile is finally discharged from the end of the Throwing-Stick. The form of this, as modern examples in the British Museum show, is that of a flat rod with a groove along it in which a dart can lie, and a stop or projection at the end to prevent the butt end of the dart from slipping off it. Now implements of this fashion, supplied with rod and groove and stop, occur in some numbers among Magdalenian utensils, and no. 1 on Fig. 133 shows a simple early example from Placard. The 'stop' is always at the end of the implement furthest from the hand, and as it is the most conspicuous part it receives special attention

¹ Nos. 1 and III on Fig. 133 are from a paper by H. Breuil in *Compte Rendu de la XIV^e Congrès International d'Anthropologie et d'Archéologie Préhistoriques*, Genève, 1912, pp. 198, 199. Nos. II, IV, and V are from casts obtained from the Museum of St-Germain.

from the ornamentalist, and an animal's head or whole form often makes its appearance.

One remarkable feature about these implements is the smallness of their size and sometimes their air of fragility which make them look more suited for hunting on the doll's house scale than for launching lethal darts against a Rhinoceros or a Mammoth. The mystical is of course brought in to explain the anomaly, and extant specimens are by some regarded as mere camouflages of the real thing got up for magical purposes. If this be the case, one asks why the real thing which should be large and strong has never turned up in any of the 'gisements,' but what we are concerned with is not the use but the artistic treatment of the object. Here we find matter of distinctly artistic value, for the establishment of relations, which we are making in these chapters of such importance, is distinctly in evidence. Two pieces of outstanding importance will suffice to illustrate this. One is a 'propulseur' from Mas d'Azil in the Piette collection at St-Germain. It is a specimen of what Déchelette¹ describes as the normal type, a cylindrical rod of deer horn nearly a foot long, with the end of the shaft furthest from the stop bevelled off on both sides as if to fit into a split or grooved stick which would give it any required additional length. No. II on Fig. 133 gives a photograph from a cast of the piece, while no. V shows on a larger scale the very remarkable carving on the upper part. We see there in front boldly cut in relief displaying a full-face foreshortened view of one of the edible animals. Between the two forelegs is contrived a groove in which the dart can lie. The photograph, no. V, shows the summit of the rod rising above the top of the creature's head and furnished with a projecting stop in the form of a hook. On each side of this we note how the ears are set in closely and the long horns are curled in with the express purpose of enclosing firmly the projecting part above

¹ *Archéologie Préhistorique*, p. 157.



FIG. 133. 'Throwing-Sticks' from various sources.

the head. Then lower down the head is seen in the profile view to be flattened back so as to range with the chest and forelegs in order that the dart should lie level. Only the front part of the creature is thus shown, and that is adapted in every detail to the purpose of the object which is being adorned. The head, the breast and the two forelegs, the knee joints of which as well as the cloven hoofs are carefully indicated, are thus forced into the same vertical plane, and the result is a work of art of quite a distinct category from the purely naturalistic representations.

Art of the same kind, with the due recognition of the connections between form and decoration, is in evidence in the second selected piece, one of the best known of all single works of mobiliary art. This is the so-called 'Dagger with the Reindeer Hilt' from Laugerie Basse, first published by Lartet and Christy in *Reliquiae Aquitanicae*, Plate B, xix, xx. Here the head of the piece, Fig. 133, iv, photographed like no. ii from a cast, is formed by the complete figure of a Reindeer so treated as to suggest a hilt. As a fact the figure seems to lend itself so perfectly to the grip of a small hand¹ that the interpretation of the object as a poniard seemed too obvious to be questioned. Later on questions arose, and it was pointed out that the poniard was not a form of implement found in Magdalenian deposits, while furthermore if the piece were used in this fashion it would infallibly snap at the weak part between hilt and blade. Hence the alternative explanation of the piece as a Throwing-Stick, which is now in vogue though not universally accepted. In this case the Reindeer figure would furnish the stop on the implement which would be grasped by the other end that used to be regarded as the point. Recently the Abbé told the writer that he thinks now that the piece is unfinished and that the head part would ultimately have been cut off and spliced on to a rod of the

¹ Professor Macalister does not quite agree with this. See his *Text Book*, p. 399.

requisite firmness and length, as must have been the case with the *Mas d'Azil* piece no. 11 just described. The dart he believes would lie between the two forelegs as in the last case and be stopped by a projection from the underside of the creature's throat. There are difficulties here which at once occur to any one who handles a cast or copy of the original. The projecting part under the creature's neck Breuil interprets as the lower part of a stop or hook which held the butt end of the dart, but a profile view of the whole implement shows that it would have to stand out much higher than it is now before it could serve its purpose. It seems much more natural to view in the projecting part merely the tufts of hair which all visitors to the Zoo will see under the neck of the Reindeer. To get rid of the difficulty in accepting Breuil's explanation, Count Bégouen has been led to suggest that the dart may have lain along the back of the beast instead of along its belly.

For our purpose the further discussion of these questions would be futile. The Reindeer at any rate is there, and is well worth a little study from the present point of view. It is quite possible, even likely, that the natural form of the antler when broken or roughly cut to shape suggested an animal's figure, but it certainly did not give a pattern of how it should be worked out in detail. It may not have been the idea to make it into a hilt, but it had to be a compact and convenient form suitable either for that purpose or for providing a bed for a dart, and the needful arrangement of the creature's anatomy was carried out with a tact and a feeling for style that would have been a credit to Alfred Stevens himself. The forelegs are tucked away under the body, while the hind legs are stretched out beyond their natural extension in order to effect a junction with the stem. The antlers would present a difficulty, but this was resolved in brilliant fashion by throwing the head back so that they lay flatly along the shoulders. If it be argued that the artist need not be credited with much originality for he may only have followed the accidental forms

of the broken antler, there is an answer ready in the Mas d'Azil piece, for here the treatment of the conventionalized Cervide must be purely original, and if this be the case why should not the same be true of the Reindeer?

In passing now to the Dance we may recall that notice has already been taken of what we may call the raw material of the dance, and we have seen that this raw material may be of various kinds. It is only its transformation into a form of art by the regulating influence with which we are now dealing that is our present concern. The dance¹ is always accompanied by music of some kind played or sung in time to which the movements of the performers correspond. Time is the essential underlying factor in all human music. As Karl Groos remarks in his *The Play of Man*,² it 'seems to have antedated melody' as 'the most salient quality of music,' and time is also of the essence of the dance. It is enough if we take as examples of the dance of primitive times the 'Corroboree' dances of the natives of Central Australia, which though now dying out have been carefully observed and described by travellers of the last generation; of ancient dances those described by Athenaeus or Lucian and sympathetically discussed by Mr F. A. Wright in his little book *The Arts in Greece*;³ of modern dances the Victorian waltz well danced to one of Strauss's measures—a reference that will bring an indulgent smile of contempt to the face of any devotee of the ultra-modern styles.

The primitive and the ancient dances, and modern ones

¹ It must be understood that the subject of the dance, primitive, ancient, modern, and ultra-modern, is of enormous scope, and while the books from which information on it is to be gained constitute a literature, no satisfactory general treatment of the vast theme has, to the writer's knowledge, yet appeared. Hence all general statements in the text about 'the dance' must be taken to admit of exceptions being adduced that would not however deprive the generalizations of substantial validity.

² London, Heinemann, 1901, p. 23

³ London, 1923, chapter i.

also, are of two kinds, gymnastic and mimetic, the former consisting in merely physical movements and gestures, the latter imitative and obviously presenting embryo forms of the drama. The movements in both kinds of dance are varied and sometimes even violent, while even the gymnastic dances introduce expressive gestures so as to become more or less imitative, but the point is that all these movements are regulated by time as given in the beats of the music, and it is a further feature that these regulated movements may be shared by a number of performers whose exact accord, each with the rest, is as remarkable as the precision of the time-keeping. It is also a very common phenomenon in ultra-modern as well as in primitive dances that the movements become a kind of obsession and are kept up till the bodily powers are exhausted. Karl Bücher, in his inspiring volume *Arbeit und Rhythmus*,¹ ‘Work and Rhythm,’ remarks, ‘All primitive people dance, they dance till they are in a frenzy and till their physical powers fail them ; often even till the performers with bloody foam upon their lips sink fainting to the earth.’ The dance in these post-war days is just as entralling in its fascination as among the savages who will dance till they drop. With the powerful motive of dancing longer than any one else had ever danced, an American damsel is reported to have danced—not in the least till she herself crumpled up—but till she had reduced to collapse all the dancing partners and all the musicians that were in successive relays available, and worn out every pair of suitable shoes !

This obsession that the movements of the dance bring about is not due merely to the fact that it is a form of self-expression. This character always attaches to it, as we see in the case of the best modern dancers, the skirt-dancer Kate Vaughan, Adeline Genée, Maud Allan, and the best of the Russian dancers, but it is a form of self-expression before it becomes an art. It becomes an art through the control

¹ 2nd Ed., Leipzig, 1899, p. 2c.

exercised by the element of time, and Hirn and other writers on aesthetic explain the obsession just spoken of by the movements becoming 'rhythrical.' Here is introduced a word round which has grown up in modern psychological circles a small literature, and a word the definition of which seems to have been given up by many as hopeless,¹ while the explanation of the entity which it expresses is also an insoluble puzzle. 'It is not easy,' writes Groos, 'to assign a general explanation for the peculiar charm of rhythmical movement,'² and Grosse³ admits that 'it would . . . be impossible to give a satisfactory elucidation of it.'

In the following few sentences the subject is envisaged from the special point of view taken in these chapters, for this is a point of view too often ignored by the professed psychologist, and we must with art in our minds criticize the common use of the word 'rhythm' as equivalent to 'measure,' and make 'rhythm' stand for something more advanced and more subtle than the mere repetition which we will assign as the meaning of the more limited word 'measure.' Now what happens in the early stages of the development of the dance is the reduction to time, in accord with a regular succession of sounds, of the originally irregular movements of the body. Why irregular movements should become measured is much the same question as that we have already asked about pattern making or about the ordered arrangement of objects strung together in a necklet. In the case of bodily movements however there is a physiological reason for the regularity, in that natural processes, such as the heart-beats, breathing, walking, and the like, are normally regular, and it stands to reason that the inner processes of exquisite delicacy that go on in connection, say, with taking a step, are accomplished

¹ E. A. Sonnenchein, *What is Rhythm?*, an Essay, Oxford, Blackwell, 1925, p. iv, 'An eminent classical scholar told me recently that he had not "the faintest notion" of what the answer should be.'

² *The Play of Man*, p. 89.

³ *Beginnings of Art*, p. 149.

more easily and with less waste if they are repeated, than if continual re-adjustments were necessary owing to the fact that the steps we were taking varied each time in length and in the rate at which they succeeded each other. On the other hand there is a tendency, very observable in children, to delight in *irregular* movements because of their freedom and variety, and 'besides the walking, running, hopping, and skipping . . . the child makes use of every imaginable turn and attitude of the head, trunk, and limbs, and a careful study of the various gymnastic motions of all times and peoples could hardly reveal greater variety than is found among these little ones.'¹ Regularity in movement, Groos says, must be acquired, and he reports that he had never found a child 'who kept time regularly and with assurance without some teaching and example'.² There seems here an inverted form of the old warfare between the flesh and the spirit. The former demands regularity the latter freedom, but the body wins all along the line and dance movements inevitably submit to the control of measure.

When this control is established it becomes insistent and absolute, and there is no feature of primitive or ancient dances that has impressed itself more strongly on observers than the time which is kept throughout the often complex movements of both the gymnastic and the mimetic dances. The observance of measure may induce a condition approaching to hypnotism, because the attention is riveted on the expectation of the constantly recurrent impression, and Groos insists that dancers 'whose movements are adjusted in sympathy with the rhythmic repetition of pleasant sounds are all possessed by a kind of temporary madness which compels them to exert their powers to the utmost'.³ When these powers are at full strain and the exciting effect is intense of the 'delicious tumult and madness of motion',⁴ we might expect that the conditions

¹ *The Play of Man*, p. 88.

² I.c., p. 89.

³ I.c., p. 368.

⁴ I.c., p. 92.

would tempt the half-delirious performers, or some one of them, to break away from the established control and indulge in purely personal gestures all 'on their own,' and to get back to the pristine liberty of the free fling of the limbs or the caper. This does not however happen, and the time given by the music remains the dominant factor even till the stage of collapse.

We owe some interesting descriptions of primitive dances at perhaps their best to early travellers among the natives of Central Australia. The Corroboree dances of the latter—the name seems to mean 'assembly'—are solemn functions in which a large number take part. There is a considerable body of performers, sometimes we are told as many as four hundred, generally all males, while the women form the orchestra and by beating on a very primitive kind of drum give the time to the dancers, and the rest of the people stand round as interested spectators. The performance is always at night and is carried through around, and by the light of, a huge fire. Fig. 134 from Brough Smyth, *The Aborigines of Victoria*,¹ Frontispiece to Vol. I, helps us to visualize the scene. The fire has been kindled in an open glade of the forest and on the further side of it are seen the dancers in fanciful costume. Beside the fire stands the leader or rather conductor, a native of distinction, who holds two staves of office which he strikes together to give the time. On the near side of the fire the women are squatting on the ground with opossum skins stretched between their knees on which they beat with their fists. On the sinister side are gathered the spectators. We need not follow the description of the dance with all its varied movements now restrained and now free and even violent, for the one point that is of importance for us is the fact that all these movements engaged in simultaneously by a large number of individuals are performed in exact time, as if they were the

¹ London, 1878. The accounts of the dances given here are quoted from reports of earlier travellers.



FIG. 134. An Australian Corroboree. From R. Brough Smyth,
The Aborigines of Victoria.¹

1, 2, 3 of troops upon parade presenting arms. At one moment of the dance described there is a uniform shout from all the performers and this we are told seems to proceed from a single throat.

Another dance described by an early traveller was of a mimetic kind and represented with the most curious accuracy, first, a herd of cattle browsing in a glade the poses and movements of the creatures being rendered by the performers with uncanny accuracy, and next a raid by a party of whites also perfectly camouflaged, and a combat à outrance between them and the native defenders. Every movement we are told was carried out precisely in time. Of a certain war dance it is reported that 'as is usual in savage dances, the time was kept with an accuracy never at fault.' Of a somewhat similar-classical dance we have a description in the *Anabasis* of Xenophon.² An armed husbandman enters, lays aside his weapons and sets to work to plough. He is attacked by a robber but catches up his sword and shield and engages with him in a

¹ By kind permission of Kegan Paul, Trübner & Co.

² vi. 1.



FIG. 135. Dance (?) of Women round a figure of a Man.
Wall painting from Cogul, near Lerida, Spain.

furious single combat, the point being that all the movements, as we are expressly told, were performed in exact time to the music of the pipes.

How far the organized dance carried out strictly in time had advanced in palaeolithic days we cannot tell, but that there were animal dances of a mimetic kind can be reasonably conjectured. Single figures, often fancifully 'got up,' occur as we have seen in parietal and mobiliary art, and may be those of dancers,¹ but the only picture yet published showing what seems to be the performance by a company of a ceremonial dance, is the well-known Eastern-Spanish wall painting at Cogul near Lerida, Fig. 135, which has been supposed to exhibit nine women dancing round one man or as some think from his small size an effigy of one. There is no indication of any order or measure in the performance, but the one female that is seen up in the air is thought to be executing a leap as part of the movements. Single figures that are commonly labelled dancers occur in the same phase of Spanish art. Fig. 136 shows one from Alpera in the district of Valencia. The striking nature of this figure, which looks like a *pas seul* of an armed warrior, as well as the fact that the

¹ Fig. 63 (p. 98), dexter side, shows one of these.



FIG. 136, Armed Warrior, executing a war dance (?).
Spanish wall painting at Alpera. With kind
permission, from Obermaier, *El Hombre Fisil*.

women in the Cogul picture are dressed, a feature we have not come across in the parietal art, calls attention to the existence of rock paintings in this corner of Europe different from those we have hitherto had before us, and introduces the subject of the so-called 'Capsian' art, that must presently occupy our attention.

Gestures and movements controlled by measure in the form of the simple repetition of single beats of music are not art in the full sense of the term, but correspond to the equal disposition of incised lines on a strip or bar of bone, to the symmetry and regularity of Solutré lance-heads, and to the display in graphic or plastic representation of a single object like a Bison out of all relations to a background or to other objects. When these gestures and movements become *rhythymical* instead of merely *measured* there is an immense

aesthetic advance. Wundt has observed this, and illumines by a flash of really philosophical intuition the wearisome disquisitions and records of indecisive experiments that under the rubric 'rhythm' load the pages of the Journals of Psychology. 'Equal impressions,' he writes, 'manifesting themselves at equal intervals produce a wearisome effect that is never rhythmical. For the production of an aesthetic effect' there are needed 'two different impressions at least . . . in regular alternation.'¹ Here is justification for the use of the word 'rhythm' in the advanced sense we have attributed to it. As applied to actual motion rhythm is not mere regularity. The movement of a body of troops marching 'left'—'right,' 'left'—'right,' is not rhythmical, but the progress round a Victorian ball-room of a couple that knew how to waltz *was* rhythmical, for this was not 1—1—1—1 but it was 1, 2, 3—1, 2, 3—1, 2, 3, that is to say it is not the repetition of a single movement (for the two steps, 'left' and 'right,' are practically the same) but the carrying through of a complex group of movements which are then repeated over and over again, while the couple are not only gyrating gracefully in these repeated movements but making a smooth rotary progress round the room.

It is a question on which psychologists take opposing views whether 'rhythm' applies in strictness only to sound, as in music and poetry, or may be used in regard to motion, while it is a further question how far it may be extended to objects made up of various parts but immovable. Is there a rhythm in architecture or in sculpture? The Greeks, from whose language the word is derived, had no hesitation in giving by their practice the answer Yes, and they wrote of 'Egyptian rhythm,' meaning the general pose and arrangement of Pharaonic statues, and predicated 'rhythm and symmetry' of the statues of Pythagoras of Rhegium. Rhythm and sym-

¹ French Translation in *Bibliothèque de Philosophie Contemporaine* of *Éléments de Psychologie Physiologique*, Paris, 1886, II, 205.

metry are different in that the latter refers only to the statics of a shape, its measurable geometric proportions when at rest, whereas the former, which of course means literally 'flow,' may be taken in a kinetic sense as equivalent to the familiar artistic expression 'flow of line,' suggesting the movement of the eye in following contours that rise and fall like the ripples on a stream, and that carry the eye along, not in an even sweep, but in motions that alternate. The technical term 'composition' is perhaps the best equivalent for 'rhythm' in this sense as applied to a work of sculpture, for the effect of this depends a good deal on this 'flow of line,' in which the idea of movement is involved. Again we may note that the arrangement of the constituent parts of the Grimaldi necklace, Fig. 125, is rhythmical, for the repetition is of a complex group, while mere uniformity or even the gradation in an even line of larger and smaller cannot be called rhythmical or artistic. In the dance as a developed form of art as it became in Greece where the happy phrase 'sculpture in motion' could be applied to it, 'rhythm' in this sense gave it a large part of its aesthetic value, while the mere regularity or measure is only an earlier stage of artistic control that will in time lead on to the more subtle regularity of rhythm.

CHAPTER IX

THE REPRESENTATIVE ARTS IN THE LIGHT OF THE FORE-GOING ANALYSIS OF THE BEGINNINGS OF THE ARTS IN GENERAL.

COMING now to Representative Art, we have noted that the stage of advance towards art in the proper sense marked by stringing similar objects together in a single row or in simple gradation, or by the observation of time in the motions of the dance, is equivalent to that of the stark naturalism of the Bisons of La Grèze and Altamira. In these it cannot be said that artistic composition equivalent to rhythm in the other arts is really in evidence, and without this the art of painting has not yet come to its own. ‘Really in evidence’ is said because it is possible to discern in some Magdalenian designs a first beginning of this all-important artistic advance, and this brings us to our Heading (8) in the Syllabus (p. 102) ‘Advances towards grouping and the natural setting of objects : Artistic composition.’

One instance of such an advance we have already in the first Chapter examined, and noted with some interest the accommodation of the form of the Mammoth to the shape of the field that it had to fill. This distinctly comes under the category of artistic composition, and there will fall to be noticed presently (p. 243 f.) another instance which seems to give us artistic composition of another kind dependent on grouping. In certain cases where there is a juxtaposition of figures and a group has been inferred, it is now recognized that the conjunction is accidental and that the figures have nothing to do with each other. In other cases the juxtaposition is intentional but may be explained on special and entirely

non-artistic grounds. It may be asserted generally with full confidence that groups of objects, either forming artistic compositions, or displaying some scene where action is forward and a story told, can hardly be said to make their appearance, or, if they do, it is only in a very few, perhaps sometimes problematical, cases, which are however, for this very reason of their exceptional nature, of special interest, and deserving of careful analysis.

That this is true of Aurignacian and Magdalenian art will be readily admitted, and this art has been called by the German term 'Einzelkunst,' or 'Art of the single thing,' not of things in their relations. It may be asked however whether evidence of advance beyond this stage may not be found in that other pre-historic phase of art supposed to be more or less contemporary with the Aurignacian-Magdalenian, that had its seat in Southern and Eastern Spain, and exhibits obvious African affinities. It has already been mentioned more than once under its name 'Capsian.' Catedrático Obermaier, who holds the chair of Pre-historic Anthropology at Madrid University, has written fully on this phase of art¹ which has also been made a subject of intimate study by the Abbé Breuil. The former writes as follows, " 'Capsian,' a name derived from Gafsa (Capsa in antiquity) in Tunis. It follows immediately on the Mousterian, in which its origins are lost.'² Again, 'Capsian . . . was a phase of culture contemporary with and equivalent to the Aurignacian, the Solutrian and the Magdalenian of the North of Spain and of France.'³ It has been held also that Capsian art was not only contemporaneous with Aurignacian but actually inspired it. It is certainly a remarkable fact that, though Aurignacian and Magdalenian culture and even art were diffused over Central Europe within pretty wide limits, the particular artistic form

¹ The second edition of his work on Fossil Man in Spain was published in Spanish at Madrid in 1925 under the title *El Hombre Fósil*.

² *El Hombre Fósil*, p. 126.

³ *Ibid.*, p. 276.

of mural painting was confined to the 'classic region' figured on the Map (p. 47). This region borders to the South on the parts of Southern and Eastern Spain dominated artistically by the Capsian culture, and the special form of this artistic culture is just the art of wall painting on rock surfaces. Hence it is a natural hypothesis that Capsian influence may have led to the development of the same form of art in that part of the vast Aurignacian region that was open to influence from this quarter. If the rock painting had been an independent Aurignacian product, it might be urged, why should it have been confined to one part only of the region, and be unrepresented more to the North and East?

These questions of the chronological and the artistic relations between Aurignacian and Capsian art cannot be discussed here, and on the whole Capsian question we must await further illumination partly to be expected from the joint work on the subject which has been in preparation by the Abbé Breuil and Mr Miles Burkitt of Cambridge. In the meantime it must be noted that the date above indicated is not universally accepted. For example, there are excellent Spanish archaeologists who think that Capsian art is of far later development than the art we have been considering, while from the artistic point of view the two phases of art present contrasts in the matter of style that militate strongly against the hypothesis just outlined. As to the intrinsic character of the art in question, however, there is ample evidence, and some of this will now be laid before the reader.

There are marked differences between this Capsian art and that which we have been considering, though in important respects the two agree. Though they may not be contemporaneous both are pre-historic, and both are on the whole curiously well preserved. Capsian paintings are, like the Magdalenian, carried out with the use of natural coloured earths, and are disposed on the rock surfaces which sheltered or protected human communities. In Eastern Spain these

are walls of shallow rock shelters, rather than of caverns proper with their galleries and inner recesses. It must be noted however that, discovered comparatively recently, in Southern Spain in the province of Malaga, there are caves, and not only rock shelters, and in some of these the work approaches in style that of the Cantabrian and French caverns though in other respects it is purely Capsian.¹ The two artistic phases agree too in subject in that they almost all have to do with hunting. There are however extraordinary differences, first in scale, and next in style, that is, in the way in which the two sets give artistic expression to the common theme. As regards scale, though the Magdalenian animals are of very varied dimensions, from about seven feet in length downwards, yet they are on the average fairly sizable, whereas the Capsian paintings are in comparison more like miniatures, and Obermaier gives the average height of the human figures at about two-and-a-half to six inches.² In the matter of style, in the Aurignacian work the animal of the chase and this object alone is the artist's preoccupation, the actual incidents of the hunt being only hinted at in obscure fashion, and the hunter himself (in the parietal art) never coming into view. In the Capsian drawings on the contrary whole scenes of the chase are displayed with as many men as animals, and all, especially the human actors in the scenes, in full movement. The animals, most commonly Cervides, are well drawn, though not so intimately observed nor rendered in such detail as the Magdalenian ones, and lacking almost entirely the stately dignity of so many of the latter. Fig. 137, from a painting now destroyed, near Calapatá in the Valencia district, is a good example. It is the men and the women that make the interest of the representations, and the number and the

¹ H. Breuil, 'Nouvelles Cavernes Ornées paléolithiques dans la Province de Malaga,' *L'Anthropologie*, xxxi, 1921.

² *El Hombre Fósil*, p. 276, 'Las representaciones humanas . . . Son por lo general de 6 a 15 cms. de altura.'



FIG. 137, Two Stags, now destroyed,
at Calapatá, Spain, from Ober-
maier and Breuil



FIG. 138, Hunters and Hinds, with
Stag above, from Obermaier.

preponderance in the pictures of the former are quite exceptional in view of what has been said (p. 96) about the general neglect of the male figure in palaeolithic art. The men hunters are figured in the most sketchy style possible, but are always to be recognised as human, and are thrown into the most vigorous, even extravagant, but generally quite intelligible poses and actions. They seem as Breuil has said to be ‘*endiablés*’—‘with the devil in them,’ and are sometimes heaped together into what may be called a ‘*Menschen-gewimmel*,’ to be compared with the Animal medley on the plafond at Altamira.

A hunting scene in Fig. 138 exhibits what looks like a charge against a line of hunters on the part of a herd of Hinds while the Stag seems to hang back a little. The use of the bow and arrow, of which there is little or no trace in Aurignacian art,¹ is one feature which makes one rather suspect the very early date claimed for the Capsians. And these

¹ An inference has been drawn from certain details on Magdalenian darts that are interpreted as feathering, in favour of these last being really arrows and implying the use of the bow. See however (p. 147).



FIG. 139, Wounded Warrior
collapsing, from Obermaier.

FIG. 140, Spanish (Capsian) wall
painting of Archer, from Obermaier.

comparatively advanced weapons are also seen employed in human warfare, of which there is no symptom in the Aurignacian paintings. A fight is shown on p. 285 of *El Hombre Fósil*, and Fig. 139 shows an armed warrior pierced by hostile arrows and in a condition of collapse. A war dance seems to be given in an illustration on p. 279 of Obermaier's book, and Fig. 136 has been interpreted in the same spirit. Personal adornment is conspicuous on the Capsian men, who are equipped with headdresses or feathered plumes, Fig. 139, ornaments round the waist, Fig. 140, and also round the legs below the knee, Fig. 140. Barbed (and feathered?) arrows are seen in Fig. 141.

The female figures which are far less numerous than the male exhibit the startling innovation that they are clothed in long skirts, and wear headdresses or caps, the upper part of the body being bare. This is the first appearance we have seen of clothing, if we except the waistband round the male figure in relief from Laussel, Fig. 64, and it is curious to find it here in an art that may have come up from torrid Africa, rather than in the more northerly Magdalenian. The most notable appearance of women is in the dance picture from Cogul, Fig. 135.

Scenes from ordinary life are not excluded. A picture



FIG. 141. Capsian Hunting Scene,
from Obermaier.



FIG. 142. Hunter and Bees, Capsian
Genre Scene, from Obermaier.

often reproduced shows a mother taking out a small child for a walk. Fig. 142 gives a view of a scene that is quite exceptional—a climber taking a comb of wild honey while the angry insects buzz around him. It was well remarked in *The Times* in a review of *Fossil Man in Spain*,¹ ‘This art, though presenting minor variations, . . . is characterized by an extreme vivacity and a positive genius for *genre*. These traits once for all differentiate it from the sacred art of the north—an art given over to the magic of dooming, and hence seemingly incapable of representing ordinary mortals.’

These words emphasize the extraordinary difference between the two sets of wall paintings, a historical connection between which is maintained by some leading authorities. That in this branch of art Capsian can be said to have in a

¹ August 13, 1925, Literary Supplement, p. 529.

way created Aurignacian wall painting, while the style of the two is so utterly different and there is this striking contrast in the matter of the arms of the men and the dress of the women, is hard to believe, and it is best to regard the whole question as still *sub judice*. The artistic interest of the situation is another matter. The coincidence in point of time, if Catedrático Obermaier be right, and the local contiguity, of two styles of the same kind of work so sharply contrasted is in itself a remarkable artistic phenomenon, and adds greatly to the impression which the reader must by this time have received of the astonishing richness in artistic interest of this very early period of human history.

As a necessary Appendix there should be added here a few words on another branch of early artistic activity located in North Africa, similar in many respects to that of Southern and Eastern Spain, but differing markedly in technique, and of a date that does not seem yet to have been fully ascertained. The reference is to delineations of animals and sometimes of men on rock faces in Tunisia, Morocco, and the Hinterland back to the Atlas. These 'Felsbilder' have been recently published in an elaborate work noticed below.¹ In his Introduction Obermaier maintains the cultural unity of these parts of North Africa with Spain, when in the later palaeolithic period all Middle and Southern Spain was influenced by North African Capsian art with its naturalistic human representations, contemporary in his opinion with the more northerly animal art of Aurignacian to Magdalenian times. The special North African group with which the volume deals is characterized by outline designs of animals, as a rule single, made first by lines of pick marks, that are afterwards run together and worked into smooth grooves some wider and some narrower. There is very little attempt at modelling or the use of colour. The artistic merit of the work

¹ Leo Frobenius und Hugo Obermaier, *Hadscha Maktuba*, urzeitliche Felsbilder Kleinafricas, München, 1925. Introduction by H. Obermaier.

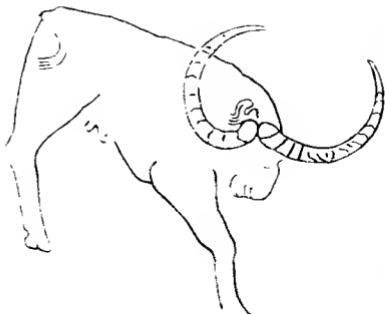


FIG. 143. North African Animal Drawing on Rock, from Obermaier.



FIG. 144. African Wall Painting. Bushmen and Kaffirs fighting.

is small, the human figures being far inferior to those of Southern Spain and the animals not a patch on the Cantabrian, and the work seems independent of, though perhaps (?) contemporary with, that of Spain and Southern France.

Fig. 143 gives a specimen in the form of an incised drawing on rock of a buffalo. Quite recently Colonel J. C. B. Statham, C.M.G., has reported on examples of stone age art in Northern Africa which he had seen and photographed in the course of his extensive travels. ‘Pre-historic and ancient rock drawings and paintings,’ he writes, ‘are found in many parts of Africa; the method of engraving being used almost exclusively in the North while rock paintings prevail in the South. In North Africa rock engravings are found from Sinai to the Canary Islands, and the Mediterranean to the Sudan, and beyond the Sahara.’¹ The engravings of the large horned buffalo are specially old, as the creature is of a breed only represented in fossil remains, and he considers them contemporaneous with the old stone age in Europe. ‘The drawings of North Africa,’ Colonel Statham notes, ‘have much in common with those of the Aurignacians in Europe and the Bushmen in South Africa. . . . The animal drawings of the Atlas have the same vivid realism as those in France and Spain and the Bushman caves I visited in

¹ *Illustrated London News*, August 13, 1927.



FIG. 145, Bushman Hunter stalking the Ostrich.

South Africa.' The remark calls attention to the important fact that the parietal art with which we are concerned in these chapters is unique no doubt in its aesthetic quality but not in its character, for in this it resembles similar art widely diffused among primitive races though specially well represented in Africa. Two specimens of South African or Bushman art may be figured here, one, Fig. 144, showing a scene of cattle raiding and consequent fight in which figure Bushmen and Kaffirs. It is painted on the wall of a cavern in Basutoland. The other, Fig. 145, of artistic quality so far superior that it may be compared fairly with the French 'art pariétal,' is a Bushman painting that represents a hunter stealing in disguise into an Ostrich run. His is the figure on the sinister side and he has to show part of himself to explain the situation. The apprehensive gestures of the genuine birds are excellently given. This is really up to La Madeleine form, while the other painting can only aspire to Capsian affinity.

This rapid survey of the Capsian artistic area has increased the extent of the field we have to examine for evidence of grouping and composition and the setting of objects in due relation to their surroundings. In the Capsian work, though there may be abundance of figures human and animal, and actions going on in which each group is concerned, the relations among them are not determined artistically, that is to say, with a view to composition. The elements in the repre-

sentation are brought together independently of these artistic considerations. What is going on is generally hunting or fighting and in one instance a dance. There are also one or two scenes apparently of pure genre. These scenes may from the present point of view be held to represent an advance on the 'Einzelkunst' or 'Art of the single thing,' of the Aurignacian-Magdalenian area, but it is an advance which at the most points the way to artistic progress without in fact evincing this progress, while on the other hand the artistic qualities in the art, truth to nature, precision of detail, and the like, are immeasurably inferior to the parietal art of the classic area we have been considering. We may leave with this the Capsian art, and turn to the question of far greater importance and interest how far Aurignacian and Magdalenian art, already possessed of solid artistic qualities of limited range, shows signs of extending this range and producing an art of relations. These signs we have already seen are very slight, but they occur in connection with both human and animal subjects.

In the list of Headings (p. 101) we have reminded ourselves already of '(7), The merits and limitations of Aurignacian-Magdalenian design,' followed by '(8), Advances towards grouping and the natural setting of objects,' and under these there are two points for consideration. The art, to start with, is what has been spoken of above as an art of single things each for itself, but the treatment of these single things involves certain considerations of importance, and an inquiry into these will occupy a few pages. The question of the combination of these single things into groups and of artistic composition generally is a different matter and involves a further inquiry along the same lines as those just followed in the case of the dance and the other arts, an inquiry as to the influence of the principle of Form in establishing those relations on which art in the strict sense depends.

We may start the first inquiry with the La Grèze Bison of Fig. 49 (p. 81) which we have regarded as the first clearly defined monument of Aurignacian art. The horns it will be seen are drawn as in a full-face view, and this corresponds exactly with the Egyptian convention of a full-face eye in a profile view of the head, and also to the bold adoption in profile feet of two internal views in order to avoid the confusing perspective in the outer view of all the smaller toes.¹ With this exception the creature is in severe profile and only shows the nearer leg of each pair though without the hoofs. Now it so happens that the investigations of the late M. Didon of Périgueux in the Abri Blanchard brought to light not long ago in a Middle Aurignacian layer a broken stone slab on which are painted in black the legs and belly with some other indications of a standing Bison, with all four legs shown. The pieces are in the Museum at Périgueux but they were found too late to be noticed in the Report on the Blanchard discoveries published at Périgueux in 1911. M. Didon, whose recent loss is greatly to be deplored, had the kindness to send to the writer a sketch of the fragments reproduced here in Fig. 146, the lost upper parts of the creature being indicated in the sketch by dotted lines, and he also gave ample assurance that they come from a Middle Aurignacian 'gisement' and that there is no doubt as to their date. M. l'Abbé Breuil has kindly in conversation confirmed this chronology. This does not mean that this is the first example of a quadruped drawn in profile with its proper complement of legs, but the evidence makes it early and we may take it as representing a very important step onwards from La Grèze, in that it shows a recognition of what Leonardo is quoted as saying about painting—that its primal object is to show

¹ See the masterly rendering of the standing figure in relief of Hesi, on the famous wooden tablets of the third Dynasty in the Cairo Museum. The turning from profile to full-face and then back to profile again is a real achievement in point of style.

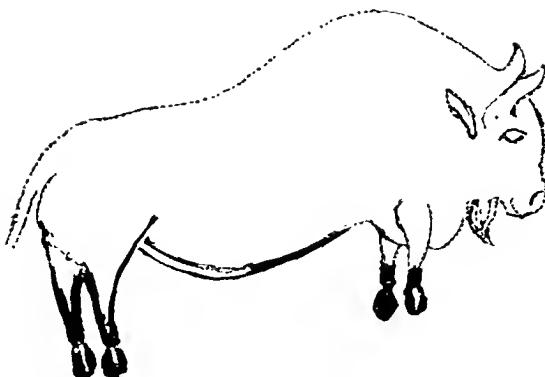


FIG. 146. Sketch of Bison painted on stone in the Abri Blanchard. Only the lower part is preserved.

a body in relief detaching itself from a plane surface. In other words the Blanchard drawing exhibits the creature's third dimension, not only its length and breadth but its thickness away from the eye, which in the La Grèze Bison is entirely ignored. The artist was of course quite unconscious of what he was doing, but he was taking a first step in a progress that was not to reach its destined goal till the time of the Italian Renaissance. So to draw on the flat that the mass of the object in view and not its mere contour is brought home to the inner vision of the beholder is an achievement of quite modern times. The Egyptians could not do it, nor save by a sort of accident could the Greeks and Romans. Greek vase painting, which presents to us in abundance the most exquisite and often expressive outlines, boggles habitually over the third dimension. One of the loveliest drawings ever made is on a polychrome Kylix in the British Museum and represents Aphrodite riding across the water on a swan. The artist has been so fastidious in the matter of line that he has made an alteration in the inclination given to a flower which the goddess is holding out daintily in her hand, yet he has ignored completely the lady's substantialities and has seated her on the creature's wing just where it joins the body, in

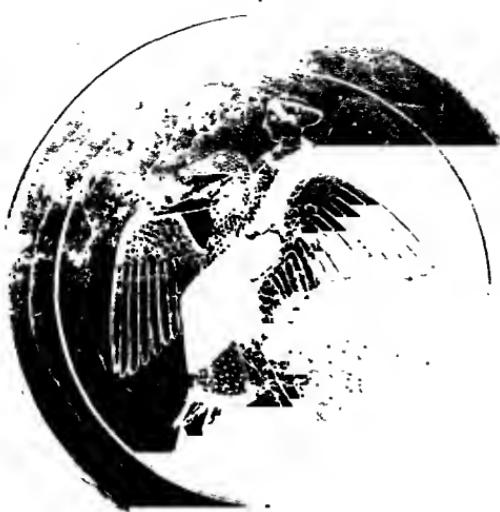


FIG. 147. Aphrodite Riding on a Swan, from a polychrome Kylix in the British Museum.

a situation where there is obviously no room for her. In the well-known mosaic of the Battle of Issus from the House of the Faun at Pompeii there is much better drawing, as in the horse in the foreground, but the classical wall painters are constantly breaking down at this crux of the draughtsman's art. The same is true of Romanesque mural decoration, and in the fine painting in the Cathedral at Brunswick of Herod's Birthday Feast Herodias is on one side of a long table of substantial breadth and Salome on the other, but the mother is whispering in the daughter's ear as if they were both upon the same plane. The introduction in the fifteenth century of the scientific study of perspective was the real turning point, and when Raphael sketches a nude, every stroke of the pen or silver point indicates depth to just the same degree as it marks extent of surface. The drawing of Rembrandt's Elephant in Fig. 82 (p. 119) makes us realize to the full at the first glance the solid mass of the great creature.



FIG. 148. Bisons at Niaux.

It is noteworthy that in the case of the Font de Gaume Rhinoceros, Fig. 80 (p. 117), and we may now add in that of one of the Niaux Bisons, shown in Fig. 148,¹ the palaeolithic draughtsman has used an expressive line that seems to caress the roundness of an animal's body, but this is quite exceptional and does not lead any further. In the matter of the four-legged Bison it will be noticed in Fig. 146 that the body and head of the beast, as one knows from innumerable other instances, must have been drawn in profile, but the legs are shown in a three-quarter view from the back. So seen they are drawn correctly enough, but it is noteworthy that, in the numerous other examples of standing beasts drawn with four legs showing, it is sometimes found that the fore pair may be given in fair perspective as seen obliquely from the front, while the hinder pair are correspondingly shown from the back, the result being the impossible one that the two legs which in the profile view are nearer to the

¹ This photograph though exhibiting nothing specially remarkable gives again a good idea of the way the drawings come on the irregular rock surfaces. The Bison standing characteristically on his head on the dexter side of the print has the roundness of the belly indicated by sweeping curved lines rather faint but discernible quite clearly in the original and in the negative.



FIG. 149. The 'Bellowing Bison' from Altamira.

eye, that is are on that side of the creature turned towards the spectator, are shown closer together than the more distant pair. This is however at worst only the sort of mistake that is common in Pompeian wall paintings. Taking about forty complete figures of standing animals in the illustrations to the five Monaco volumes, we get the following statistic. In seventeen cases both pairs of legs are seen from the same point in what we should call a three-quarter view, generally but not always from the front,¹ and are perspectively correct, though the legs are not always of the right relative lengths. Thus the 'Bison mieux conservé' of the Altamira plafond Fig. 24 (p. 63) has the two forelegs very carefully and strongly painted but the right leg is decidedly too long. At Pindal, p. 77 of *Cavernes Cantabriques*, a good standing Bison has its further hind leg too long. This is the case also with the much admired standing Hind of the same plafond, Frontispiece (1), where both of the more distant legs are too long. There are other

¹ e.g., *Altamira*, Fig. 38, *Cav. Cant.*, pp. 162-3 (Castillo), show examples seen from the back, and the same applies to the famous 'Bellowing Bison,' Fig. 149, at Altamira, *Altamira*, Pl. xvi.

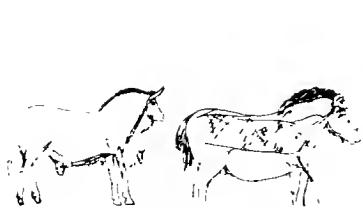


FIG. 150. Bull and Horse from Combarelles.

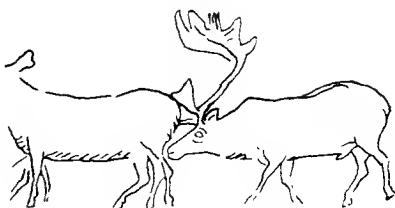


FIG. 151. So-called 'Combat de Rennes.'

positions in which a profile pose is maintained throughout the figure and the point of view is opposite the middle of the flank ; here the more distant pair of legs is seen within the nearer pair—in true though very exaggerated perspective. There are in the forty examples about a dozen of this type, which gives us two thirds more or less correct renderings out of the whole number examined. The contrary arrangement is however sometimes found that has already been described as ‘impossible,’ in which the more distant pair of legs are further apart than are the nearer pair. Thus in the Altamira volume, at p. 23, there is a Bull and a Horse from Combarelles on the same line, the Bull having the more distant pair closer together while the Horse has the nearer pair closer together. They are shown in Fig. 150. When the general view is a simple profile from one point this latter position of the legs is of course incorrect.

Obviously there can be no question of any conscious analysis of these poses on the part of the palaeolithic artist. The impressions he had derived from nature were fixed in his mind and they were materialized by his brush or graver without having been compared and studied in a way only possible to a modern. The impression of a three-quarter view of a pair of legs would be a very clear one, and it was reproduced directly without considering how it might work in with the general impression of a profile. A three-quarter view of the head of a Bison must have been often enough seen, but the impression of it would be much less easy to seize and

reproduce than that of the legs. This being the case, it is remarkable that we do find indications of such a perspective view of parts of an animal other than its legs, and the Altamira Bison, Frontispiece (III) from *Altamira*, Plate xix, is as near an approach to a front three-quarter view as could well be found in the caves. It is however nearly always the hinder quarters that are so treated rather than the more subtle and varied forms of the head, though the Abbé sees a three-quarter feeling in some Bison heads, and there is certainly an indication of the further eye in the Bison's head of Frontispiece (III), while the earlier (Old Magdalenian) chest of a Horse on p. 107 of *Cavernes Cantabriques* is another example, but the Altamira Hind of Frontispiece (I) and the Bellowing Bison in the same cave given in Fig. 149, and especially the Horse, *Les Combarelles*, Planche A, no. 29, exhibit it far more positively in the views of hinder quarters where the two rump masses separated by the tail are very definite. It must not be forgotten that in the faint drawing of a great Tectiform Sign at La Mouthe, given in Fig. 54 (p. 91), the Abbé sees a definite three-quarter view. All this of course represents the beginning of an advance towards drawing in three dimensions that merits to be signalized, though since this advanced kind of drawing, as we have just seen, was only evolved in quite modern times the palaeolithic artist can hardly be blamed for not doing more for this development of his art. The above is enough to show that quite unconsciously the cave artist was pointing the way to an ultimate far-off perfection of the drawing art.

The cave artist's best achievement in the rendering of form at rest is probably to be found in the recumbent Bisons at Altamira noticed (p. 128) see Fig. 89. The artist was of course greatly helped here by the natural boss of rock which he utilized, for this gave the sense of mass which strikes one in the delineation. An analysis of the drawing of the best of them from the artistic point of view is given by Herbert

Kühn in his *Malerei der Eiszeit*, p. 18. ‘The head is bent down with the muzzle under the knee of the foreleg that is drawn in with the utmost firmness against the body. The hinder limbs are more freely treated. The hoofs are fast against the ground, the joints seem full of life so that one thinks the next moment will see the beast spring up, and this impression is heightened by the uplifted tail lightly indicated as it waves in the air.’ After noticing other points such as the masterly drawing of the horns, and the distribution of the black, white, and red-brown of the colouring, the writer concludes, ‘there is here an organism ; the whole creature is a well-compacted unity. In a manner entirely impressionist is the head only suggested, for any more elaborate treatment would have destroyed the impression of the momentary. The further hind leg is also only hinted at. Here everything is anticipated for which, after forty or fifty thousand years, the modern Impressionists are contending as an entire revolution in art. To the essential is given form and substance, the non-essential is left out. The form expresses the content, desire does not outstrip capacity. What we have before us is finished art, an art that up to now has been too little appreciated.’

In the matter of the representation of action, it was noticed in the Introductory Chapter that we cannot credit our palaeolithic artists with either the desire or the capacity for analysing and reproducing the actual movements which instantaneous photography has now revealed to us. Many actions which he rendered in the walk or the canter, accord fairly well with the well-known Muybridge photographs, though where the difference comes in, in the position perhaps of one out of the four limbs the other three agreeing, the artist gives a more convincing appearance of movement than the camera. The male Reindeer following his mate from Laugerie Basse, called popularly the ‘Combat de Rennes,’ is putting his daintily sketched legs in quite the right positions, Fig. 151,¹ and so is

¹ *Font de Gaume*, p. 179.



FIG. 152, Three sequent animals, from Teyjat.

the Bull, the middle figure of the three in the procession, from Teyjat shown in Fig. 152. The famous Galloping Reindeer from St-Marcel, Fig. 153, though perhaps too familiar for reproduction here, would be scientifically correct if one of its hind legs were brought forward. The action of the Galloping Wild Boar from the Altamira plafond lends itself to criticism, Fig. 25 (p. 63). Instantaneous photography demands that for scientific truth one of the four outstretched legs should be bent inwards. The Abbé Breuil has acutely noticed that the gallop is not the full one, or 'Galop volant,' when the two hinder feet might be off the ground at the same moment, for if this had been the case the two hoofs would have been bent back at the fetlock joint, whereas they are in the drawing evidently both touching the ground. On the whole action he remarks justly 'il est vrai que le galop allongé n'est pas réal, mais il exprime puissamment une impression très forte, que l'artiste a cherché d'exprimer par un *type* qui la symbolise.'¹ It may therefore be said that as a rule action is rendered in an artistic and not a scientific spirit, and the creatures are made at all hazard to look as if they were moving. At the same time there is secured a fairly large measure of scientific accuracy.

In two cases noticed by the writer the eye of the hunter artist has been quick enough to catch a position, revealed to us moderns by photography, in which a horse stretches out in front or to the rear a single straight leg that by its stiffness as seen in the photographs of horse races seems to be the negation of movement, so that when we see a photograph of

¹ *L'Anthropologie*, 1902, p. 152.

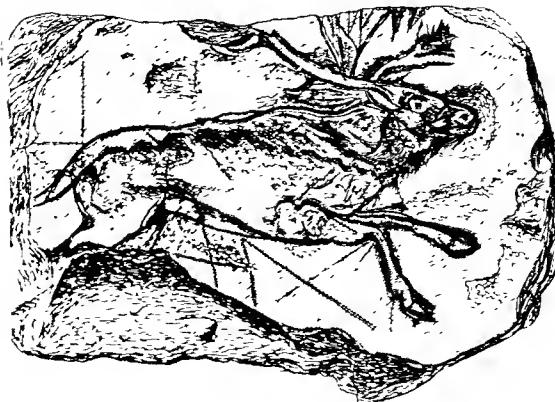


FIG. 153, Galloping Reindeer, from St-Marcel.

an unfortunate horse frozen into this gesture we wonder what causes the excitement of the jockey on his back. One of these drawings is given in Fig. 154. It is part of one of the many interesting pieces from Teyjat. The positions of the Horse's legs are quite interesting to note, and the two forelegs, one relieved against the other, are delicately though uncertainly drawn. The inner markings which occur on this Horse, as well as on others that are often reproduced, are noteworthy as showing an effort to represent surface texture. If there have been quoted a passage of somewhat extreme laudation of the Recumbent Bison from a professed aesthetician, Herbert Kühn, a practical artist of our own country may be summoned to give a professional report on the best known animal in motion, this same Galloping Wild Boar from the Altamira plafond that has been figured previously, Fig. 25 (p. 63). Mr Vernon Blake thus writes of it :¹ 'The suggestion of the volumes' (by tone modelling) 'is above criticism ; aesthetically the drawing is completely satisfying.'² After

¹ *The Art and Craft of Drawing*, pp. 104-5

² The piece has suffered through the decomposition of the surface of the rock (*Almanra*, p. 91). There is fuller shading, with the 'volumes' more completely made out, in the small Bison shown in Fig. 101 (p. 149) which may be referred to for comparison.

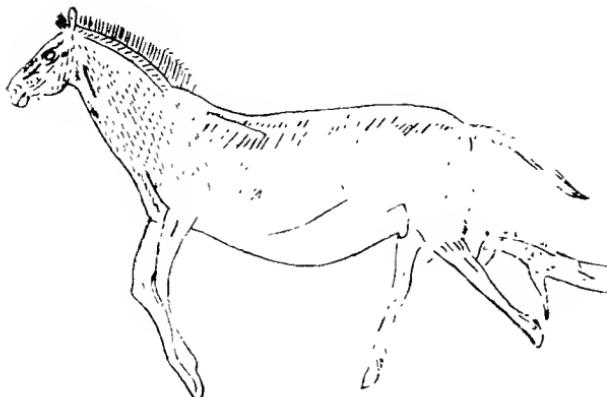


FIG. 154. Horse from Teyjat with straight hind leg stretched out.

noticing what has been already mentioned, the fault in perspective shown in making the further hind leg too long, he points out 'While there is palpable connexion of solid form between two points our artist manages his relief admirably, but he would seem to lose his head, if I may so express myself, when he has mentally to cross an intervening space and place one complete object behind another.' On another page we read,¹ 'Can we strictly look upon it as a primitive drawing? When I examine it I feel curiously satisfied by its aesthetic. . . . One would be inclined to see in the Altamira drawings, as one sees in Tahitian art, the final and perfect blossom of aesthetic expression of a mentality that had attained its apogee, an apogee circumscribed and limited in many ways, even in the extent of its capacity for artistic expression. But though the extent of this capacity was limited its quality was strangely fine. What more savant distribution of accents, both from constructional and decorative view-points, could one desire than that of the Boar? With what exact aesthetic skill the calcanea' (bones of the heel) 'are accentuated! How the fleshy line of the abdomen is left as a finely traced but, this time, unaccented curve! With what address are the accents

¹ p. 357 *t.*

placed along the tremendous rhythm of the spine, and how they remind one of the deft handling of some great Chinese master of the brush ! No, it is difficult indeed to relegate such work to the naive realms of primitivism.'

Apart from the question of correctness in the rendering of movement there is that of the degree of accuracy aimed at or secured in the representation of details. Space would not suffice, nor would the writer's zoological knowledge avail, for the task of an analysis of the drawings from this point of view ; while such a survey, even if it could here be carried out, would be otiose or even impertinent in view of the numerous chapters in the great Monaco books in which the Abbé has brought together for comparison the extant drawings of particular classes of animals, and carefully analysed them from the artistic and zoological standpoints. It will be enough to note that the cave artist was impressed by the fact signalized by the Hebrew Psalmist that a bullock ' hath horns and hoofs,' and to see how he dealt with typical details like these. Going back to the La Grèze Bison of Fig. 49 (p. 81) we note that the extremities of the limbs are not attempted at all, and one is reminded of Life-Class days when one got down to the ankles just when the model's sittings were up. M. Didon's Middle Aurignacian Bison, Fig. 146, with its four legs makes amends, and all four hoofs are boldly emphasized though their shape is not clearly made out. Later on quite a point is made of the firm clear delineation of the 'sabot' of the Bison or other cloven-footed animal, and in Magdalenian art there has been established a sound convention for the rendering of this prominent detail of the anatomy of a creature who however is left everywhere save at Limeuil without an inch of ground on which to plant the hoof. As an example Fig. 155 shows on an enlarged scale the fore part of the Bison on the sinister side of Fig. 148, and the drawing of the leg is a good specimen of the precise rendering of detail. The upper part of a Bison's foreleg is thick



FIG. 155. Foreleg and fore part of Niaux Bison,
to show detail.

owing to a growth of hair, but it is thin below where there is little more than the bone. This feature with the fetlock tuft and the 'sabot' is clearly emphasized.

The horns of the Bison presented a more difficult problem than his hoofs, but it was not one that was found, like the Reindeers' antlers, insoluble. We have noticed that in the late work at Limeuil the complexity of the lines of these difficult features seemed too much for the artist, and in Fig. 156, the important polychrome at Font de Gaume of the standing Reindeer sniffing at the kneeling one,¹ though the drawing shows some very careful and delicate detail work ('tous les détails de la tête sont superbement et fortement gravés'), the antlers of the former beast are conventionally indicated by plain sweeping curves without any attempt at branching. There is a much bolder attempt in Fig. 151, the sequent Reindeers called at one time 'Combat de Rennes.'

In other late Magdalenian work, as on the Altamira plafond, while the perspective of the Bison's horns was often fairly mastered, we can hardly say the same of the other

¹ *Font de Gaume*, p. 74 and Pl. xxviii.



FIG. 156. Two Reindeer at Font de Gaume. One kneeling.

more elusive antlers. We have heard Herbert Kühn call the drawing of the Recumbent Bison's horns 'masterly' (p. 230) and the swing of the lines is often enough caught and accurately fixed. That a certain amount of study and experiment was here involved may be divined from a remarkable group in one of the less important caves in Northern Spain, that of La Loja.¹ From a 'paroi' there comes the remarkable group shown in Fig. 157. Five Oxen, one represented only by its head, seem to be pursued by a creature of a different build, probably intended for a Wolf. A similar incident occurs several times in the caves, and is one of the two motives, the other being connected with breeding, that bring creatures together in a way that involves grouping.

The now ruined group at Covalanas, Fig. 103, is one example of creatures associated through a common danger, while Fig. 158, from the final narrows at Font de Gaume, gives a group that is explained as three Horses confronted by a feline Beast of Prey. Incidentally notice may be taken of a curious detail. The forelegs of the middle and largest Horse would be hidden by the body of the nearest Horse, but as the artist knew that they were there he brought them into view much lower down under the belly of this nearest Horse which thus appears to have six legs! M. Luquet has a good deal to say about the difference between drawing

¹ *Cavernes Cantabriques*, p. 53 f.



FIG. 157. Group at La Loja of five Ocen pursued by a Beast of Prey (?) . Note the drawing of the horns.



FIG. 158, Group from last cleft at Font de Gaume.

things that the artist sees and things that he does not see but knows to exist.

To return to Fig. 157, the drawing is reproduced here partly on account of the character of its execution, which is obviously very defective both as regards general form and details. It is probably early work and the complete failure of the Beast of Prey may be due to the artist's inexperience. The description in *Cavernes Cantabriques*¹ accounts however for some deficiencies, for the work, which is on a fairly large scale, is high up on the wall and only accessible with difficulty by scrambling up an inclined bank of stalagmite twenty feet high. The foothold at the top is very precarious, and the drawing which is rather scratched than incised could in parts be only executed at arm's length from a parlous standing point. Hence faults in proportion and detail can be partly excused, but the piece is useful as an example of work distinctly below the level of most of that shown in our illustrations. The two lowest Oxen have their legs rendered in the faulty manner noticed (p. 226). The main feature of interest for us is the rendering of the horns, in which the

¹ P. 55 f.

Abbé Breuil sees no attempt at perspective.¹ Two distinct methods are essayed, the horns at one time curving downwards on each side of the muzzle, at another pointing upwards, as if experiments were being made to find some fitting method or convention for portraying this feature.²

Something has here been said of the single figures of the animal art of the caves from the points of view indicated in the Introductory Chapter, and we may pass on now to the question of grouping and composition. Here also, as in the inquiries just conducted, we shall find once and again beginnings of an advance which were never followed further, and which are difficult to explain, except on the basis of that variety in artistic gifts leading to new departures, which has been in evidence in the modern schools since the Renaissance, though much less so in the older schools such as that of Egypt. Artistic individuality may have existed in palaeolithic circles, as it seems to have existed among the Aegean peoples of pre-historic Greece, and these exceptional efforts may be thus explained.

The question of grouping on a large scale, that is the distribution in a decorative spirit of masses of representative designs over large surfaces treated with a view to a single general effect, may have a word, partly because the animal drawings generally were at one time thought to have this decorative character, and to be deliberately disposed for the adornment of the walls of the rocky domiciles. This theory for which there is no evidence is now given up, but the possibility remains that large rock areas in the inner parts of the caves not used for residence may have been treated as decorative unities. The Salon Noir at Niaux would lend itself admirably to a large decorative scheme, but to judge whether

¹ *Cat. Cant.*, p. 58.

² A very curious effort at perspective in drawing a pair of horns can be seen in Fig. 166c (p. 247).

there be any sign of this a full illumination of the whole interior would be necessary. The instance which seems to support most effectively the possibility just mentioned is Combarelles, where in a cave with but small signs of human habitation a large collection of drawings is disposed in what looks like a considered scheme. The interior consists practically of a single narrow gallery three to six feet wide and high, and the long strips of rocky wall are covered on both sides for a length of a hundred yards with incised delineations of animals. The two series opposite to each other correspond, and this may be held to imply a certain decorative purpose. Still it must be admitted that if there were to be drawings in the cave at all they could not well be disposed in any other way than along the low rocky walls. That the extension of the decorated surface is the same on both sides may be held to show intention.

Attempts at grouping or composition on a smaller scale may be signalized in the case of both animal and human subjects.

There is a small class of cave pictures or incised drawings which show two or more animals in conjunction, generally one following another. Now it may as well be said here at once that there is a small area of our general field of study that cannot be exhibited before a general audience in quite all its aspects. There is nothing in these representations in the least degree lascivious, but the polite reticences of civilized society had not yet come into fashion. Happily we are accustomed in these post-war days to frankness tempered with common sense, and there is more freedom in matters of this kind than in the Victorian epoch, before Mrs Grundy, at the bidding of her granddaughters, had shortened her skirts. . . . These animal groups then appear in the main to be connected with what the Germans call 'Vermehrungszaub' or 'magic of increase,' and a picture of a male Bison following or flirting with a female suggests a prospect of the appear-

ance in due time of a nice plump Bison calf to furnish a dainty dish for a Sunday dinner. This is all plain sailing, for an increase in the number of beasts available for food is from every point of view a desideratum. It is a different matter when 'magic of increase' is brought to bear upon the human family, for an increase in the number of mouths to feed is for a small and struggling cave community a somewhat serious matter. There is no evidence at all that the cave dwellers adopted the practice of infanticide, not unknown among modern savages, and we must remember the children of tender age in the 'Grotte des Enfants' at Mentone who had been presented with dainty skirts covered all over with shells (p. 1-3), but on the whole the use of positive magic to secure large families seems hardly probable. We have no evidence however either of the economic conditions of cave society, or of the existence or the absence of that family instinct so strong among the Israelites of the Old Testament, and indeed among Oriental peoples generally, that makes the wedded female yearn for offspring.

The question of course concerns the interpretation of those very early female figures in the round from Brassemouy and elsewhere. They have been claimed as the prototypes of the familiar images of the great nature goddess of the Nearer East, that have come to light in such abundance on Eastern Mediterranean sites. These present their subject as the goddess of fertility, and the details of the pieces carry out this idea. Generally speaking they are gross and ugly, but some found in Babylonia are quite presentable.

The Brassemouy ladies have been dignified by this same title of 'Goddesses of Fertility,' but the view recently urged by M. Luquet seems simpler and preferable. He sees in them the frank expression of natural erotic feeling, and in their characteristics nothing symbolical or of general import, but only physical qualities desirable in a prospective mate.

This interpretation fits a very remarkable representation

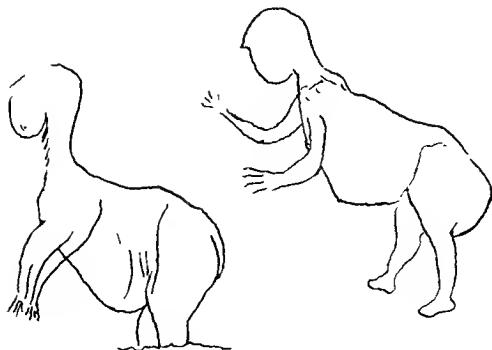


FIG. 159, Erotic group at Combarelles.

in the cave of Combarelles, in which a male figure is sequent to a female one, the sex of each being made unmistakable.

It is simply an erotic piece, of which a somewhat Bowdlerized copy may be shown, Fig. 159. Crude as it is the artistic interest of the drawing is remarkable, for it is almost the only instance in parietal art of what we can call in the modern sense a picture. It presents two human figures grouped and posed in such a manner as to express relations of feeling and to suggest an incident, and in this it is so exceptional that it could not be passed over.

Among the Limeuil incised drawings on stone is one, no. 126, shown in Fig. 160, that is of quite uncertain import, but which the fancy may envisage as a picture. There are two human figures, one recumbent, with the other bending over it and apparently stretching out towards the upper part of it a rod or twig of some kind. Beyond the head of the recumbent personage are various upright objects of uncertain character. All that can be said safely about the piece is that the position of the two figures suggests in a similar way a relation that would be suitable for pictorial expression.

The well-known figures of a man and a Bison, formerly called an Aurochs, from Laugerie Basse, Fig. 161, that used to be explained as a hunting scene, are now reckoned to have no connection with each other, a change of view similar to

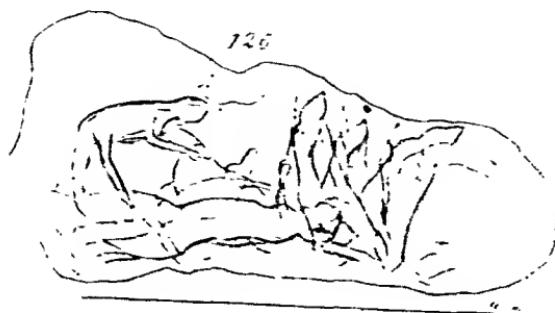


FIG. 16c. Group of pictorial character, from Limeuil.

that noticed (p. 174) in the case of the woman and the Reindeer. The man is worth notice as there is nothing grotesque or mystical about him, as there is about so many male figures.

Artistic composition can hardly however be predicted of these pieces. For a suggestion of this we must go to a work of mobiliary art mentioned above and known as the group of Stags from Lorthet, in the Pyrenees. It is an incised drawing carried through with the utmost care on a piece of reindeer horn. Hence it is drawn on a cylindrical surface, but in Fig. 162, above,¹ it is reproduced here from a cast at St-Germain that shows it as it would appear unrolled so as to present a flat surface like the drawings in the caves. Artistic composition would of course not be so easy on a cylinder as on a flat panel, but it is difficult not to see in the piece evidence of the sort of consideration that the graphic artist in advanced

¹ The upper representation in Fig. 162 gives the drawing unrolled, with the damages to the surface of the horn; the middle shows what exists clearly drawn out, and the lowest gives an attempted restoration of the whole, which is owed to Sir E. Ray Lankester, but is open to criticism.



FIG. 161. Man and Bison or Aurochs, from Laugerie Basse.

periods gives to the disposition of the objects in his field. The designer here seems to have had the feeling that his objects should be so placed as to fill up the space available without leaving empty spots. This is of course not the best kind of artistic composition such as we find in the work of the Greeks, but the draughtsmanship does certainly seem to prefigure that curious *horror vacui* so characteristic of Roman and Early Christian relief compositions. Three Stags following each other are the principal elements in the group, which is in the Piette collection at St-Germain, though of the leading animal only the hinder legs, of the second and third little more than half, have been preserved. The two remarkable features in the composition are the turned-back head and the presence of a number of Fishes of the salmon type that fill in vacant spaces in a fashion unique in this kind of work.¹

¹ The various explanations given of the presence of the Fishes do not concern us. Professor Macalister thinks they only evince the desire of the hunter artist to secure a fish course before his venison. (*Text Book of European Archaeology*, 471.) M. Salomon Reinach suspected religious symbolism. Others have seen an indication that the Stags are crossing a stream.

The turning back of the head, as we have seen, is a motive that occurs elsewhere, but here it appears to be deliberately adopted with the desire to get the foreparts of the hindermost Stag as near to the back of the Stag in front of it as is possible. The interval which would still occur between the two pairs of legs of the animals is then filled in with the Fish, the curious bend in whose body seems determined by the desire to occupy the space with more completeness. The underlying artistic idea of leaving no vacancies may be a mistaken one, but the point is that such an idea does seem to be present, and through its presence the piece becomes in the strict technical sense a work of art.

In the small and little visited cavern of Gontran, near Les Eyzies railway station, there are some animals incised on the roof that certainly suggest an explanation involving artistic grouping, Fig. 163. Below is a large Horse about three feet six inches long that crosses the roof from side to side. Above its neck a small Horse is drawn reared up on its tail, the position being determined by a natural boss in the rock suggesting the creature's head. Now above the croup of the large Horse there appears another small Horse in a position exactly complementary to



FIG. 162. The Lorthet Group. See footnote to p. 243.

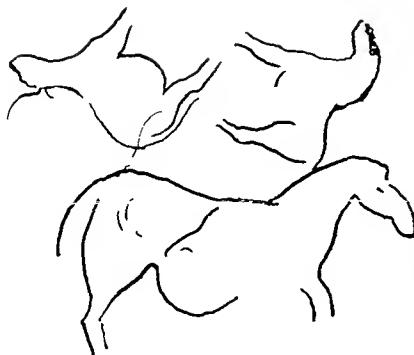


FIG. 163. Group from Gontran near
Les Eyzies.

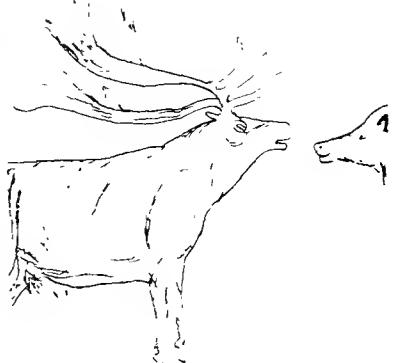


FIG. 164. Reindeer confronting
another animal.

that of the first small Horse, and it is difficult to avoid the conclusion that it was so placed in order to correspond, in which case it would be a clear instance of designed artistic composition.¹

The conjunction of animals either following or else confronting each other, as in Figs. 75,² 151, 152, 156, has been already explained on non-aesthetic grounds, and another example, with well-drawn antlers, may be seen in Fig. 164. Nothing more need be said of these. At Teyjat among the strange conglomerations of animals turned all sorts of ways and superimposed, see Figs. 92 and 96, we find one instance at any rate of designed grouping with aesthetic intent, and the drawing here has a distinct charm, Fig. 165. In front of and below a well-drawn Reindeer, showing corrections of the outline in the muzzle and throat, a Doe is figured lying on the ground, evidently from the drawing of the lips engaged in chewing the cud. Close by a little Fawn is skipping about, and the mother seems to be watching it with affectionate intentness.

¹ Captain, Breuil et Peyrony in *Revue Anthropologique*, Juillet-Août, 1914.

² The two Bisons at Tuc d'Audoubert are male and female.



FIG. 165, Doe watching her Fawn.
at Teyjat.

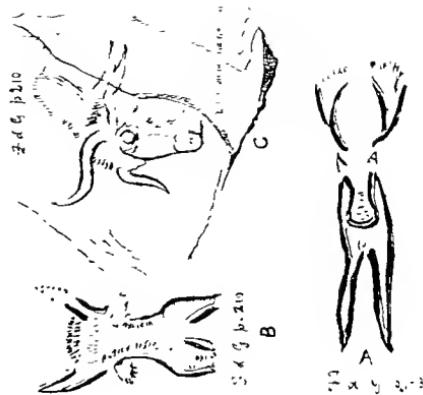


FIG. 166, Full-face views of
Bisons, etc.

Lastly there may be noted one or two exceptional pieces quite outside the general run of the animal delineations.

It has long been known that there are among the original drawings of animals certain foreshortened full-face representations. In the Font de Gaume volume, pp. 193 and 210, there are figured an Eland from the front, with its antlers, its two ears, its muzzle and forelegs, Fig. 166A, while Fig. 166B gives a view of a Bison's head and hindquarters from the direct back stand-point. Fig. 166C has been referred to (p. 239 note).

More remarkable still are two or three small drawings which seem to show a curiously modern pictorial device for creating an illusion that more is meant than meets the eye. These appear to be bold attempts at an impressionist rendering of a long string or procession of beasts of which all but the first or the first and last are only shown by summary indications. Fig. 167 gives in this way two groups of Horses engraved on a smooth stone from Chaffaud, while from Teyjat comes Fig. 168 with a similar treatment of a herd of

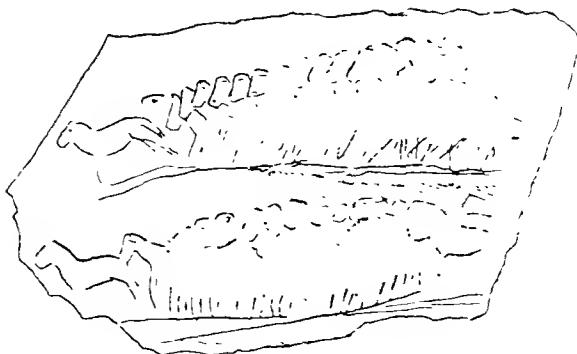


FIG. 167. Troops of Horses impressionistically rendered, from Chaffaud.

Reindeer. As placed here, it comes under a delightful sketch from Font de Gaume of a lively little pony which of course has nothing to do with the impressionist drawing. This last combines with the other two to present perhaps the most remarkable appearance in parietal art as a whole, for it suddenly proclaims itself emancipated from the trammels of Einzelkunst, the tyranny of the single thing, and claims unlimited freedom to generalize. The pieces have by some been brought into connection with the well-known bit of mobiliary art in the Piette collection where on each side of a curved strip of horn there are four studies of what seems to be the same head of a chamois. It has been considered a trial piece after the fashion of Limeuil, the effort each time of the artist being to draw the head better than he had drawn it before, while others think that the idea is merely to multiply the heads, each being just done on its own, and that the impressionist pieces merely seek in the same way to multiply Horses or Reindeer. The Piette piece however is not in the least impressionist but shows what it does exhibit, the chamois head, quite definitely and completely without a trace of 'suggestion,' and it has no relation at all to our 16- and 168. It merits special attention to note that in the Bronze Age art of the Aegean world, which is marked by

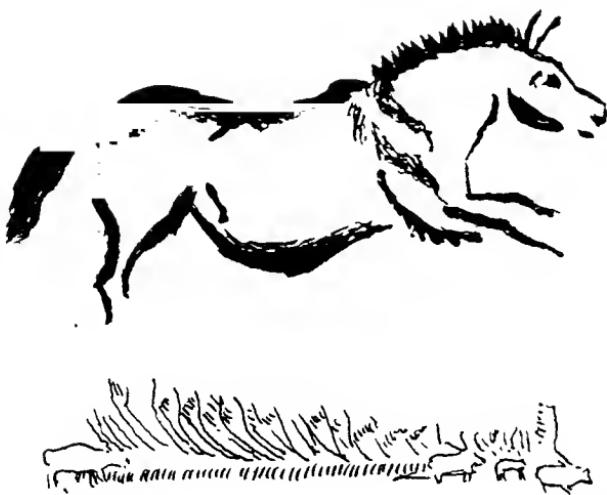


FIG. 168. Below, procession of Reindeer, impressionistically rendered. Above, Pony at Font de Gaume.

the same pronounced vein of naturalism, we see in some of the wall paintings at Knossos the same sort of summary impressionist rendering of a crowd of figures.

Quite recently the illustrated journals reproduced a Canadian photograph of an immense herd of Caribou, the American reindeer, crossing the river Yukon. It reminded one of the herd of reindeer drawn by the artist of Teyjat. The Caribou make a tremendous display of antlers which tell out with their palmettes against the light background of the water. Had they been on land their bodies would have been massed indistinguishably, but the verticals of the legs would show, and one sees a modern artist emphasizing the antlers but generalizing when he comes to the bodies and legs. And so in our Figs. 167 and 168 palaeolithic art swims up above our own horizon, and claims kinship through the essential oneness of art through all the epochs of its existence.

CHAPTER X

THE BEARING OF THE FACTS OF PRE-HISTORIC ART ON AESTHETIC THEORY IN GENERAL

We have now seen Art in various forms beginning in activities and productions that are not at first artistic, but become artistic through a certain element of order or arrangement that may result in pattern making, or in pictorial or sculptur-esque composition, or in measure and rhythm as controlling movement. Primitive man, so far as the facts we have been investigating show us, was not impelled to artistic activity through any special artistic impulse. He did not say to himself as he sat by the cave fire, 'I must be an artist,' in the way in which people at the present day may commune with themselves. If there were a feeling in the palaeolithic mind for art, it was only a vague feeling not realized sufficiently for man to be able even in thought to give it expression. In the course of his daily avocations however he found himself doing certain things for various reasons, and realizing these activities as pleasurable so as to be tempted to continue or repeat them. The pleasure involved took different forms, but all the forms had this in common that the impression of delight resulted always from a quickening of the sense of personality. It was a pleasure of self-externalization, with an inner sense of stimulus or even of uplifting, that raised the agent in his own estimation, and that might bring to him an added sense of satisfaction or even of pride when what he had done or made had won for him the favouring regard of his fellows. Yrjö Hirn¹ is disposed to regard art as essentially a social function as if there could be no manifesta-

¹ *The Origins of Art*, ch. vii.

tion of it without people to look on. This would be going too far. The dance is very specially a social function, yet we cannot but remember R. L. Stevenson's weird description of the old warlock's solitary dance on the Bass Rock, in which he gave expression in a *pas seul* to his fiendish exultation. Sculpture and painting produce results that are at any rate in idea exposed to public gaze and approval, but this is not a necessary condition of their production. In Chinese artistic literature, as sampled for English readers by Professor Giles,¹ we find records about Chinese court officials of the highest rank, whose Mandarin robes covered but did not stifle the souls of artists, who would at intervals withdraw themselves apart into mountain solitudes, where, like 'Nature's sleepless eremites,' they would spend weeks with paper and brush and ink, painting and painting and painting again the rocks and trees and clouds and cataracts for the pure love of them, and without any thought of a public or of a guerdon.

This sheer delight in the mere practice of the art we have assumed to exist from the very beginning in early Aurignacian painting, which involved as we have seen a creative act inspired at first by the suggestion of a natural form in some accidental configuration of rock or stalagmite. When the representation based on this had fully materialized there was in the artist's mind something of that inner exultation finely described by Benedetto Croce, 'Un esempio di piacere puramente estetico offre il poeta o qualsiasi altro artista nel momento in cui vede (intuisce) per la prima volta la sua opera ; quando, cioè, le sue impressioni pigliano corpo e il volto gli s'irraggia della divina gioia del creatore.'² This 'irradiation of the countenance with the divine joy of the creator,' in the view taken in these pages, completely reduced to a

¹ *An Introduction to the History of Chinese Pictorial Art*. Shanghai, 1905, p. 108.

² *Filosofia dello Spirito, I, Estetica*, quarta edizione, Bari, 1912, p. 93.

secondary rank the utilitarian considerations the existence and importance of which we have nevertheless frankly to acknowledge. The pleasures which accompanied the other activities which led on ultimately to art may not have been so intense as the reflex influence of artistic creation, but they were of the same character in their stimulating influence on the sense of personality. These pleasures became the motive forces which brought about the repetition of the acts that involved in each case the pleasure, and which furthermore secured through the continuance of the activities the useful practical results, such as the training and discipline resulting from the dance, which have been already signalized, and above all secured the perpetual submission of the activities to the principle of Form.

This original motive force, the pleasure resulting from the activity, may remain in operation after the activity or the product has become artistic, but it is supplemented and increased by other influences to analyse which is a matter far beyond the scope of these chapters. It is enough to say that with the advance of civilization the arts become increasingly charged with spiritual content and are made expressive of the deeper thoughts and more elevated ideals of humanity at its highest. It needs hardly to be said that the advance and the increase are not continuous or regular, nor are they manifested by all the arts at the same time. Still, what has just been said will be recognized as in a large general sense a truth. What great buildings have meant to the world ; how much humanity owes to men like Masaccio, Michelangelo, or Rembrandt ; what a splendid compensation has been vouchsafed by the music of the last two centuries for the loss of the ideal element in the formative arts under the deadening influence of the Renaissance—themes like these, of overpowering interest, are not here to be approached, and all this with much more must be taken for granted, while attention is here concentrated on the quiet work that art has

been doing for man, quite apart from the conspicuous achievements of the individual arts which historians and critics vie with each other in celebrating. The reference is to art as the embodiment of the principle of Form.

This principle of Form is the regulating element in all kinds of artistic activity—the one element that these all have in common. Artistic Form is however not mere regularity, but is Order of a more subtle kind which appeals only to human intelligence that has made some advance in culture. Artistic composition does not consist in putting one object in the centre of the canvas and four others at the corners. In the case of the bodily movements which are the foundation of the dance as a form of art, mere regularity, like that of a squad of well-trained soldiers on parade exercise, is no more artistic than the uncontrolled gestures of lads or of animals running and jumping about. On the other hand the motions of a graceful modern dance *are* artistic, for they consist in a round of more or less complex movements that are repeated after completion in a rhythmical progression, just as the arrangement of the lines and masses in a plate of Turner's *Liber Studiorum* is artistic through its subtle play of contrast and balance. In virtue of its maintenance of this principle art becomes a form-giving regulatory influence in human life, a perpetual ordering, and so making beautiful, of elements that in the actual world are scattered, irregular, and inchoate. The poet Schiller, who was also a philosopher, in his *Letters on the Aesthetic Education of Man*, divined this to be the unobtrusive mission of art through all the stages of the education of the race. 'What is man,' he asks, 'before the serene Form tames the wildness of life?' and the value of a regulatory co-ordinating influence may be claimed for artistic activity quite apart from the more direct effects of a beneficial kind resulting from each definite form of such activities. To us it seems so natural that free bodily movements should be co-ordinated by measure, that markings on an object

should group themselves in the subtly regulated order of a pattern, that we take it all as a matter of course, but ten or twenty thousand years ago it was not a matter of course, but represented a distinct stage in the spiritual progress of humanity. If it be true, as was claimed at the outset (p. 10), that we can discover in some of the earliest phases of art principles of universal application, then we may assume that through all the later stages of civilization these same principles have been at work, though under complicated modern conditions their operation may not be easy to trace.

A criticism may here suggest itself. We may grant the operation of this pleasure of self-externalization in connection with the activities that ultimately become artistic, but though it be true of them, it does not give their differentia, in that there are other activities accompanied by pleasure of this same kind that do *not* become artistic. There are various doings that certainly quicken the sense of personality yet have no aesthetic consequences. An athletic feat like jumping over a brook outside one's country habitation is a source of excusable satisfaction and pride, and may be repeated with the same sort of intention that is operative in the display of a trophy, but it never leads on to art. Adventure in travel or climbing, or the exploitation of some new device such as aviation, is another case in point. The activity in itself is an uplifting stimulating agency and achievement brings its rewards of a real kind or in the form of social estimation, yet, though there be in this way perpetuated the pleasurable feeling of pride in success just as the trophy acts in the case of the successful hunter, no art comes of it. The reader will easily think of other activities of self-expression of which the same positive and negative assertions may be made and sustained, and the analytical psychologist may find it a congenial task to ascertain wherein the activities that do result in art differ from the rest, but we may be content here with one instance that is specially to the point, the instance of Play.

The comparison of Play with Art is often made, and the two have striking features of resemblance though their differences are equally marked. We have seen that the earliest artistic activities are of practical advantage to the agent, and the same is conspicuously the case with play. Play is an activity of the utmost practical value to the individual and to the race, for, as Karl Groos has clearly brought out,¹ it is the instinctive performance by the young of every creature of the bodily and mental acts which will be necessary to it in the serious business of after life. It is not a repetition of these acts, as Herbert Spencer imagined it to be, but a preparation for them—a needful practice and training of the powers for future use. Such play is forced on the young creature by inherited instinct. The kitten pursues the rolling ball of worsted long before she has fleshed her maiden claws on her first mouse. The little girl plays (or used to play) with her doll as if it were a child because she is the offspring of countless generations of mothers, and in the natural order of things will be a mother in her turn. The creature, animal or human, Groos even says, does not play because it is young, but is young because it has to play—it is provided by nature with a season of youth so that by playing it may develop the powers on which in maturity existence and nutriment depend. It was from this point of view that the subject of play was dealt with by that great educationalist, Edward Thring of Uppingham, who regarded the training of character and judgement obtained in the football field a matter just as important for the higher interests of education as that of the class room.

There is therefore utility in the background of the activities both of play and of art, but in both play and art the agent is not conscious of the utility of what he is doing. It is clear to us how important the dance must be in early times as a matter

¹ In his two works *The Play of Animals*, American Translation, London, 1898; and *The Play of Man*, 1898, Eng. Trans., London, Heinemann, 1901.

of training and drill, but the savage dancer has no thought of this and throws himself into the performance for the enjoyment of the sense of excitement and of self-expression that it affords to him. Even in the paintings and engravings of the caves, though the utility of the work may be in theory recognized, yet in practice as we have seen, that work is evidently carried out with a pronounced exhilaration of feeling as a pleasure rather than a task. This is really the reason why none of the numerous philosophers, who have worked out systems of aesthetic on the *a priori* method, seems to have apprehended this truth—that the performance of these artistic acts is of practical value. They laid down the general principle of the absolutely free and non-utilitarian character of the act and were content to leave it at that. We see now that this artistic act may have a practical significance that is not obvious but lies beneath the surface, just as does the utilitarian element in play. It may be asked, however, If the activity of art and play be for the good of the individual and the race why should not this be acted on simply and directly as a sufficient motive? The answer is that, human nature being what it is, the enlightened self-interest and the altruism of the available agents would not suffice. We may look on it in this way. We have seen primitive man engaged in various operations all of which are for his good. For example, the hunting expedition and the Corroboree dance. Both are useful, but the utility of the first is crude and obvious—it is an act absolutely indispensable for the support of life. It is a kind of act that can take care of itself and will never be omitted because the necessity for it forces itself irresistibly on the attention. The second kind of act, typified by the dance, makes no such clamant appeal. The beneficial influence of it upon human life is not obvious but is something subtle and elusive, and as a matter of fact this kind of act would not get itself performed at all had not nature made the wonderful provision that the doing of the act should give pleasure to

the agent. It is a familiar fact that we should inevitably neglect doing things useful and even necessary to life, unless they were made pleasant to us. It is the same with art and with play—they have to be made pleasant in order to get them done. Under these conditions the agent will spend his time and strength on the acts because of the pleasure they give him, and in this way, unconscious of what he is doing, carry out the beneficent purpose the arts as well as play are intended to serve.

So far art and play run on parallel lines, but they are vitally different in the entire absence in the latter activity of that element of Form which we have seen to be of the essence of the activity of art. Of course play proceeds according to fixed rules and to an etiquette as binding as a code, but in every organized game, and we may take the games of our Public Schools and Universities as types of play, the different movements succeed each other according to the accident in each case of the moment, and are never exactly repeated. When the whistle sounds all is over. Nothing comparable with the tangible result of the activity of the formative arts remains as a permanent product, and the game can never be reproduced in the way that is possible with the organized dance. This of course constitutes an important difference between Art and Play, and it is probable that the present activity in analytical psychology may result in fruitful investigations into the psychological problems some of which are hinted at here. Without attempting to enter into these, it may to some extent elucidate the subject if it be pointed out that the difference between art and play is a fundamental one, that cuts deep down into the ethics and psychology of human nature. Art and play, to begin with, are not practised by the same sort of people. The artist is hardly ever great at games, and the reason is that his work provides him with that interest of an ideal kind that people whose daily avocations are of a prosaic order seek in play. Over against

the artist and the lover of art we may set the public-school boy who lives almost as much in play as in his books. The public-school boy has a very distinct code in which it is pretty clearly laid down what a gentleman may and what he may not do. The artistic avocation is rather on the border line, and certainly, unless English public schools have changed from what they were in the writer's young days, a boy who exhibited marked artistic leanings would only be forgiven if he had the saving gift of a fondness for games.

The reason for this is obvious. The play of boys and indeed of men in general takes the form normally of a contest. These ideal struggles for victory are a training for the serious efforts to win through and to surpass which to so many make up a great part of life. The adolescent youth whose powers are all braced up for the inevitable strain of conflict in the arena of the world, passes over the artist as one dallying away his time in a flowery meadow, if indeed he do not regard him in the light in which in the late war the lad bound for the trenches regarded the conscientious objector. The truth however is that what a man is trained for through art is in its way as necessary for fully developed humanity as the keenness and undaunted energy taught in the football field. The 'serene form,' to borrow the expression of Schiller, makes for harmony and repose, and the sense we derive from fine works of art of varied elements brought and held together in perfect unity conveys an impression of completeness that is of real spiritual value. It must not be forgotten that to the wisest of the early Greek thinkers the greatest thing in life was not practical effort or movement but the energy of contemplation. We may remember how Aristotle, at the end of the *Ethics*, in one of those electric flashes of the purest idealism which at times suddenly illumine his *sermo pedestris*, tells his hearers that they are not to follow those who tell them that being men they must think the thoughts of men, as mortals attend to mortal interests, but that they are *ἐφ' ὄστον ἐιδέχεται*

ἀθανάτιζειν, ‘as far as is possible to live the immortal life.’ We may take this notable word as covering the idea of a ‘Theoria’ wherein

‘In moments when we feel we cannot die’

the whole being is in rapt communion with truth and goodness and beauty.¹ Moments passed in this divine contemplation are to us of inestimable value as balancing the times through which we must pass of strain and effort after practical aims, aims that as healthful men and women we must follow, but which if pursued too persistently impoverish the spiritual nature. The greatest works of human art, most notably in architecture, have the power to feed the soul with the profound impression of repose and harmony. The effect on the mind of any one sensitive to an aesthetic appeal of a first view of the great Poseidon temple at Paestum is one of a vast unity of countless similar parts worked by resemblance and contrast into relations that we find ourselves exploring with never failing satisfaction. St Paul’s of London ; St George’s Hall, Liverpool ; the north block of Robert Adam’s Charlotte Square, Edinburgh ; the western façade of Reims Cathedral —in effect every architectural masterpiece is a witness to the all-importance of that establishment of relations, that balance between unity and diversity, on which beauty in the arts of form depends. In virtue of its imposing mass it is sublime, but it is also beautiful through the relations of proportion established among the parts when measured against each other or against the whole.

And Architecture is the ‘mistress art’ that presides over all pattern making, all decorative schemes, all grouping of ornamental elements into shapes of beauty. In architectural art there is embodied the principle of form, which our his-

¹ · In the Tenth Book of the *Ethics* he (Aristotle) ‘puts the claims of the Contemplative Life even higher than Plato ever did, so that the practical life appears to be only ancillary to it.’ Professor Burnet, in *The Legacy of Greece*, p. 88.

torical analysis has shown us to be of the very essence of art, the influence which by a beneficent magic, the working of which analytical psychology may one day elucidate, turns the non-artistic initial activities or products into art. This process, which began so many thousand years ago, has been at work ever since, making the things about us, our material environment, our dwellings, our furniture, our dress, our equipment, in so far as they are beautiful, minister to the contemplative side of our nature. These pure arts of form devoid of the element of representation make no such clamant appeal as do sculpture and painting, and that they have any function in relation to the higher life of man might be thought a mere fancy. Is it not however possible, if the suggestion may be allowed, that the influence of art as embodying the principle of Form may be something like the activity of Radium, a concealed unsuspected agency everywhere and at all times operative beneath the surface of apparent things? The action of radium is held by some to be of quite incalculable importance in the scheme of the universe, keeping the sun going and the earth warm, yet till only the other day it was entirely unknown. In like manner amid the tangled intellectual and ethical phenomena of the modern world, art, in this particular function of it, may be something more than a mere elegant distraction, and beneath the surface of things may all the time be shedding abroad a beneficent influence that in the future may be traced and determined.

It was noted as one of the objects of these chapters to examine some of the accepted doctrines of aesthetic in the light of the new knowledge gained in the last few decades of the earliest ascertainable facts about art in pre-historic times. Two of these doctrines have been mentioned, one that of the Freedom of Art, the other that of the Imitation of Nature as the function of representative art. The first doctrine we have seen profoundly modified by the facts of primitive art

the operations of which have a distinctly utilitarian side, whether or not the agent be conscious of this, and we may go on now to the more general question whether what we have found true of primitive times is not equally valid to-day. Henri Breuil makes the sagacious remark about the Aurignacian animal art that its connection with the practical business of life gave it a certain seriousness and solidity without which it might never have advanced beyond the embryonic stage.¹ This really applies to art at all times. The idea of art as mere pastime, as just the 'idle filling up of leisure' as Hoernes calls it,² as an activity divorced from all the practical business of life, is not really a sound idea, nor one that if it were really true we should wish to see carried out in practice. We should not, that is to say, desire our artistic work to be so detached from our mundane interests as to make these last taboo while we are ourselves confined in some ideal world of beauty. An artistically disposed person of ample means and leisure may turn out statues and pictures in undisturbed freedom, but there is an even chance that these would prove rather anaemic, or 'precious,' or of the so-called 'high-brow' order. The late Lord Leighton would have been a much greater artist if he had not worked all his life in this supposed ideal condition of artistic freedom. The unendowed artist, to whom it is a matter of stringent necessity to earn the money to keep going his house and family, will under the stimulus of the practical need 'pull himself together,' and with all his powers braced up will surpass himself in virile productions instinct with life and actuality. Of course if the pressure of the practical be

¹ The sentence is worth quoting in full:—*Si l'art pour l'art n'était pas né, l'art magique ou religieux n'aurait jamais existé; seulement, si les idées magiques ou religieuses n'avaient permis d'insérer dans les plus graves préoccupations de vie réelle l'art né pour lui-même, celui-ci, trop faiblement greffé sur les occupations essentielles de la vie quotidienne, aurait risqué de demeurer embryonnaire.* *Journal de Psychologie*, 1926, p. 366.

² 'Profane Mussebeschäftigung,' Hoernes-Menghin, *Urgeschichte, etc.*,³ 1925, p. 189.

overwhelmingly severe it may produce something like a paralysis of the creative powers, but short of this the consciousness of a utilitarian purpose will make the strokes of the chisel or brush more firm and decided, and will further, not foil, the artistic aim. When the wielder of the tools is actually in front of the canvas or the clay all practical considerations retire into the background, just as was the case with the pre-historic cave artist, whose psychology is after all much the same as that of creative artists in all ages. Indeed, if the repetition of an apt quotation may be allowed, *The Times*¹ has recently remarked that a certain desire may inspire some artists to create works of art, 'but we may be quite certain that the desire does not remain after the artist has begun his work of art ; it has served its turn and would only be in the way after the actual process of creation has begun, though it may reappear when all is finished.'

The true relations between the elements of freedom and compulsion in the activity of artistic production can be seen in architecture and in decoration.

Architecture should in logical consistency be ignored as an art by the orthodox aesthetic philosopher, because of the very pronounced utilitarian element inseparable from it. Inseparable because a building or other structure that has behind it no useful purpose of housing, or protecting, or forming a setting for practical functions of life, and no social purpose of an ideal kind such as is served by a structure like the London Cenotaph or the Scott Monument, can never be successful as architecture.

At the great Paris Exhibition of 1900 it was interesting to compare the buildings designed for the occasion but intended to serve permanent purposes of use, with those that had merely a decorative intention like the pavilions at and about the entrances. The former, in designing which the architect was bound down to the fulfilment of certain useful

¹ Literary Supplement, June 23, 1927.

aims, were good, sometimes as in the case of the Petit Palais very beautiful specimens of the architectural art, while the latter, though elaborate enough, were just—nothing. All through the history of the art indeed the designer has never been in the crude sense of the formula ‘free.’ He has always worked to a program, and has had to dispose his spaces so as to serve definite purposes of a useful often a homely kind, but no architect worthy of the name has ever been heard complaining of these utilitarian considerations as curtailing his ‘freedom.’

Again, the operations of all the decorative arts, largely dependent in many of their forms on architecture, are similarly controlled. They are none of them ‘free,’ in the sense that the limner and the carver could do what they liked ; the spaces to be filled and the treatment and colour to be applied are all given by the general scheme to which the decorative artist is obliged to conform. At one of the most advanced periods in the matter of decorative art that the world has known, the mediaeval period in Western Europe, there was control of a double kind exercised on the one side by architecture and on the other side by religion. No artists have ever been less ‘free’ in this sense than the artists of the middle ages, yet no artists have ever loved their work more or found greater satisfaction for the spirit in the exercise of their skill. We can judge them out of the mouth of their spokesman, the artist monk Theophilus, and if his own absolutely selfless devotion to beauty as only second to religion was shared to any extent by his pupils in the monastic workshops, we can well imagine these at times irradiated with something of a celestial light, till the stone walls and the bars no longer were felt to imprison, and there was freedom in the art because there was freedom too in spite of all constraint in the soul.

It may be objected to this that the control of architecture and of religion had nothing ‘utilitarian’ about it, but the

point which is being argued is that constraint of any kind is not to be deprecated offhand as if it were of necessity inimical to artistic practice. The artist may really save his life, the life of true artistic freedom, by losing it. The painter of the caves, who *qua* artist delighted as every artist must delight in getting his representative work close to nature, might easily be forced to a still higher standard of accuracy when in his capacity of hunter he realized what he was doing. The added force and precision gave to the drawing a likeness to nature so close that it was bound to compel the original to materialize, and the recognition of the utilitarian purpose really in a sense helped the art.

A certain advance in artistic theory seems to follow from what has now been learnt from these primitive facts. On the old theory as enunciated in the quotations given (p. 140) the actual operations of hunting, the stalking of the game, the shot, the capture, were utilitarian acts of necessity, forced on the agent by the need for food; whereas the paintings and carvings of animals of the chase on the walls of his cave habitation were thrown off in hours of leisure for his own and his friends' private aesthetic satisfaction. We can now see that the drawings and carvings were just as much a part of the chase as the actual launching of the fatal arrow. The throwing-stick which gave the javelin force and directness would be called on the old system a necessary implement, the figure of the reindeer, into which its business end is carved, a mere fanciful adjunct, but, as we are now told, the figure would in all probability be a charm, and in the view of the hunter a necessary condition for the full efficacy of the weapon. In face of all this the 'freedom' of the artistic act no longer stands where it did, but it may be claimed that art has really gained rather than lost by this broadening of our view of it.

Another important aesthetic theory, that in the past has

been held so universally as to become almost canonical, is the theory that the relation of painting and sculpture to nature is one of imitation, and that merit in these arts resides in the close copying of natural forms. In the present day, as needs hardly to be said, in all thoughtful minds directed towards the theory of art, the doctrine is superseded by one which recognizes to the full the importance of truth to nature in the representative arts, but treats this as only a means to the further end of presenting forms of significance and beauty that are substantial creations and not mere shadowy copies. The theory of imitation in its crude form is however still popularly held, and a discussion of it in this place will give the opportunity of envisaging palaeolithic art from a fresh angle when we shall see that it lends powerful support to the philosophic view that has just been stated.

The essential character of anything should be indicated by its definition, and an attempt may be made here to define formative art in accordance with the views on which the anthropological parts of these chapters is based. *Formative Art*, then, is a Human Activity concerned with the disposition of Natural Objects, or of Presentations of such Objects, in such a manner as to appeal to our sense of the Ideal, and our apprehension of Sublimity and of Beauty; Natural Objects include of course the human body, and the disposition of this in varied groups and poses constitutes the Dance. Natural Objects embrace also building materials, and the disposition of these creates the sublime effects of Architecture; while the term includes the elements, whatever they may be, that constitute Personal Adornment, together with the shapes and devices that in their studied distribution make up Decorative Patterns. The Presentation of Natural Objects is given to us in Painting and Sculpture, and these Objects, infinitely varied and complex, come together in Composition to enrich the world with the magic gift of Beauty.

Nothing here is said about imitation, nor need any other

word be employed in this connection save the word Presentation, which means the similitude of Natural Objects and not the tangible objects themselves. As a fact however the current theory of the relation of Art to Nature which goes back to the time of the Greeks has been always known as the doctrine of *μίμησις* or the imitation of nature. The doctrine we owe to Plato and Aristotle. Plato in many passages of his writings introduces fine and suggestive remarks about art and beauty in their influence for good upon human life, but in his formal treatment of art in the *Republic* he adopted a view that is thoroughly non-Platonic and prosaic, whereas in his own theory of Ideas he had ready to his hand the wherewithal for building up a really noble and adequate theory of the place of this great human activity in human life as a whole. This theory of Ideas as enunciated in the *Republic* may from one point of view be regarded merely as an attempt to give some substance and standing to general ideas. Plato felt that there must be some entity, something real, answering to the general term 'horse,' just as there was a tangible creature corresponding to each individual name of a horse entered for the Isthmian Games. He imagined therefore an ideal being, a Horse-in-general, existing somewhere out of sight and possessed of all equine qualities, while of this all the horses we are familiar with here below are more or less imperfect copies. This idea of 'Horse' was to Plato something transcendent, of the heavens heavenly, something to raise us by its contemplation to the sphere of the divine, and all existing horses were lamentable shortcomers. Now if an artistic friend had taken the philosopher up to the Acropolis and shown him the marble horse's head from the chariot of the moon goddess in the Parthenon pediment, now one of the treasures of the British Museum, Plato might well have felt about it what the poet Goethe felt and said, twenty-two centuries later, that it was the 'Urpferd,' the original prototype of all the equine tribe, in Platonic lan-

guage that very 'Idea of Horse' which the philosopher had envisaged in his imagination. Based on this conception, what a splendid theory of art might not the idealist Plato have created ! We may imagine him anticipating the fine passage in one of Bacon's writings in which, dealing specially with poetry, he uses words that are true of art in general. 'Its use hath been,' writes Verulam, 'to give some shadow of satisfaction to the mind of man on those points wherein the nature of things doth deny it ; the world being in proportion inferior to the soul . . . and therefore it was ever thought to have some participation of divineness because it doth raise and erect the mind, by submitting the shows of things to the desires of the mind.' There in front of the Pheidian masterpieces, where as Rodin has finely said 'the whole human dream could blossom in the pediment of a temple,' Plato might well have adumbrated a philosophy of aesthetic that would have revealed the artist as one who is ever striving to lift his work above the sphere of the actual and bring it into harmony with the Ideal. There would then have been a threefold gradation of reality ; first, the supreme reality of the Ideas ; next, the world created by art, by art that is ever striving to materialize those visions of the imagination which have some kinship with the far-off Ideals ; and then, lastly, the familiar things of the world about us. As a fact, as every one knows, Plato's gradation of reality was, first, the Ideas ; next the objects of our material environment that are only distant copies of the Ideas ; and, lastly, works of art that are only imitations of these objects, and are accordingly twice removed from truth, and altogether of little or no value. Hence Plato excluded art and artists from his utopian Republic, and handed down this aesthetic doctrine to the younger philosopher Aristotle.

Aristotle, ready as he was at times to criticize his great predecessor, accepted this Platonic doctrine of *μίμησις* or imitation as the one explanation of art, and made it the basis

of his treatment of aesthetic theory in the *Poetics*. In that treatise Aristotle discourses at large not only about sculpture and painting as arts of imitation, but about music and the dance as well as about poetry which is of course his main theme, in every case as examples of *μίμησις*, or the imitation of nature. Notice however a very curious result. Imitation is regarded as sufficient to explain all these arts, and about all of them suggestive and interesting remarks are offered by the philosopher. Throughout the whole of the treatise however there is no mention of architecture. This art, in which the aesthetic genius of the Greeks achieved some of its greatest triumphs, is not regarded as an art at all ! The Greek was so obsessed with the notion that art was imitation that any art which, like architecture, failed to satisfy the definition, was completely ignored. This of course from the point of view of sound thinking is a complete condemnation of the theory, for no definition of art that excludes the greatest of all the formative arts can stand for a moment. In the popular mind however the doctrine remains in force that excellence in painting and sculpture resides primarily in the close resemblance of their productions to nature. It was the Italians of the Renaissance who forced the doctrine so deeply into the public mind. Leonardo da Vinci is in no small degree responsible, for his intellect was completely dominated by the presumption that nature, 'the mistress of all masters' as he calls her, is supreme, and that the be-all and end-all of artistic activity is to follow nature as closely as possible in graphic and plastic representations. The Pre-Raphaelites of our own time, with their high-priest John Ruskin, have prostrated themselves before the same fetish, and in the popular apprehension of the day the dogma admits of no denial or modification.

The truth is however that, as their primary object, painting and sculpture aim not at copying nature, but at producing an aesthetic impression by the presentation of certain figures

and objects, similar to those with which we are familiar in nature, and with which certain associations are connected in our minds. In order that the figures and objects thus presented by the arts should appeal to these associations, and in this way affect our thoughts and emotions, they must be sufficiently like their natural prototypes to be recognized as the kind of things they are, and this verisimilitude can only in practice be secured by a close *study* of nature, and perhaps also a constant *reference* to nature during the progress of the work. The figures and objects shown are creations not reproductions, but they are created in accordance with the established forms and operations of nature. The artist *refers to* nature, but does not directly *imitate* her.

This doctrine as was said above (p. 265) is well understood and pretty generally accepted among the philosophical students of aesthetics of to-day. For the special purpose of these chapters it is important to note that the facts of palaeolithic art as we have come to know them illustrate the doctrine in a remarkable manner.

One popular phrase expressive of the theory of imitation is the phrase, 'art the handmaid of nature.' The parietal art of the caves, so far from being 'the handmaid of nature,' was in intention something much more like nature's mistress and controller. The designer was not waiting on nature but using nature for the furtherance of his own ends. The painter of the caves was certainly not copying natural models, for he was very commonly working in remote recesses into which live Mammoths and Bisons could not well be introduced, nor is it, as we have seen (p. 151 f.), a likely supposition that he took with him, as a modern might, into the cave small engraved patterns to which he could refer. The workers of old time were much more direct in their methods than would be implied by such cautious intermediate processes. The parietal artist had mastered the forms of nature till they had become a part of himself, and was employing

them in easy freedom. He was not working *after* nature but *before* nature, and was, as it were, showing nature the way. Nature he dominated instead of bowing before her as her bondsman, and he presented before nature the typical forms she was to materialize at his bidding. The tangible monster of flesh and blood was to be the realization of the artistic ideal.

This study of the earliest forms of art that are known to us may find a fitting conclusion in two quotations from writers of weight, conveying in forcible language the general conclusions to which each has been led with regard to the aesthetic character and value of palaeolithic art. One writer is the veteran Moritz Hoernes, and the other the editor of *Ipek*, Herbert Kühn. The former is chiefly struck by the limitation of the representative art of the caves, seen in its satisfaction in remaining through all its long history only an 'art of the single thing,' with little or no disposition anywhere evinced of advancing through grouping and composition to become an art of relations achieving aesthetic beauty through the deft handling of varied elements. Before we read his somewhat scathing denunciation there may be suggested a comparatively simple explanation of this marked peculiarity in an art that seems capable of an advance which as a fact was never made. The secret may perhaps be found in the extraordinary satisfaction which the artist, Aurignacian and Magdalenian alike, seems all along to have taken in his actual achievement. When he had accomplished the creative act, and the Bison or the Reindeer was there as in life, his task was done and he was never conscious that it was only a beginning which might be followed by new wonders if the single creatures were brought into connection as parts of a larger artistic whole. The elements in themselves as single things were so important that he felt no inclination to combine them or give them a setting. Conversely, in the far simpler artistic

forms of the geometrical patterns on the sagaias, or the grouping of pierced shells or teeth in a necklet, the single elements had no importance in themselves, but when combined into a pattern they produced something new and striking, and this pattern, simple as it may seem to us, was a creation, giving the reflex satisfaction we have spoken of so often. Hence the pattern comes out necessarily whenever lines or similar simple elements are brought together, whereas composition does not naturally follow when the elements collected together in an aggregate are presentments of living creatures each intrinsically attractive and charged with significance.

Hoernes writes : ' It is one of the most astonishing facts in artistic history that carvers and draughtsmen and painters so gifted and skilful, in all the time which elapsed from the (perhaps still interglacial) Aurignac-period up to an advanced stage of the post-glacial epoch, produced nothing but single figures, or at the very best rows of such figures, or indeed perhaps only parts of animals such as heads and limbs, or finally more or less incomprehensible signs, which can be interpreted as huts or shields or boomerangs. We look in vain for the hunting scenes which are clearly obvious subjects, or even for the simplest representations of conflicts between beasts and men. They are entirely wanting, and the artistic language of these cave dwellers is like a speech that does indeed possess a few dozen sonorous expressions for ideas that touch life on a low grade of culture, but lacks the slightest approach to syntax, or the means of building up the simplest possible sentence. What the artists and the public themselves thought of these works will always remain unknown, but if we turn their ideas into words these would sound like nothing else but " Woman, O Woman ! Soft plump Woman ! Lovely Woman ! Bison, great Bison ! Strong Bison !" and so on. All this as in primitive song may be deeply and strongly felt, but it is artistically speaking beggarly poor, and on this account we call this phase of art restricted and

monotonous, for with the highest grade of formal perfection it reaches at the same time the lowest pitch of hopeless sterility.'¹

Herbert Kühn writes in *Die Kunst der Primitiven*, München, 1923, p. 27 : 'The coloured paintings on the walls of the caves of Altamira, Castillo, Font de Gaume, are masterpieces of art. In them the momentary, the truth of the instant, is given with the utmost force. These pictures may be compared with Impressionism, with the most modern, most living, Impressionism. In both the problems are the same, the end aimed at the same. The problems of Impressionism were light, atmosphere, movement, and mass. The problem of mass is in the earlier work unrecognized, but the demand for light, atmosphere, and movement is already fully met. . . . In these pictures all is vibrating, all of a tremble with life. They are life itself with its ceaseless change . . . a picture such as one of the finest Altamira Bisons could only originate in the profoundest study of nature ; it would be impossible in mystical times deeply charged with religion. . . . But the chief point is this, the piece is not based on a mere slavish imitation of nature, but on a recognition by a stroke of genius of what is essential in the impression made on the sight. The body is not rendered as it *is*, but as it *appears to be* to the beholder. . . . A picture like this stands at the summit of an artistic epoch. It is the oldest artistic culture of the world, a culture that can maintain itself firm and clear beside all that has come after it.'

'Reinach has brought these works into connection with Totemism. Klaatsch has explained them as the expression of a desire to exercise by the representations a magical influence over the wild creatures which man desired for food—but no ! any secret mystical influence is entirely foreign to

¹ Hoernes-Menghin, *Urgeschichte der bildenden Kunst in Europa*, dritte Auflage, Wien, 1923, p. 123.

this art. It is an art that is wholly true, wholly alive, without any element of reflection—it is Being itself.

'Men ask sometimes for an explanation of art. What do they mean by this? Is not art itself explanation, statement, and revelation? Men ask what is the purpose of art. Its greatness is that it has no purpose, but combines in itself all ends. It is in itself beauty and truth, because it is the re-creation of the divine. So stands it here at the beginning of human history, in unsuspected strength, in the perfection of beauty, and is the link that binds man to the highest.'



FIG. 169, Outside Niaux.

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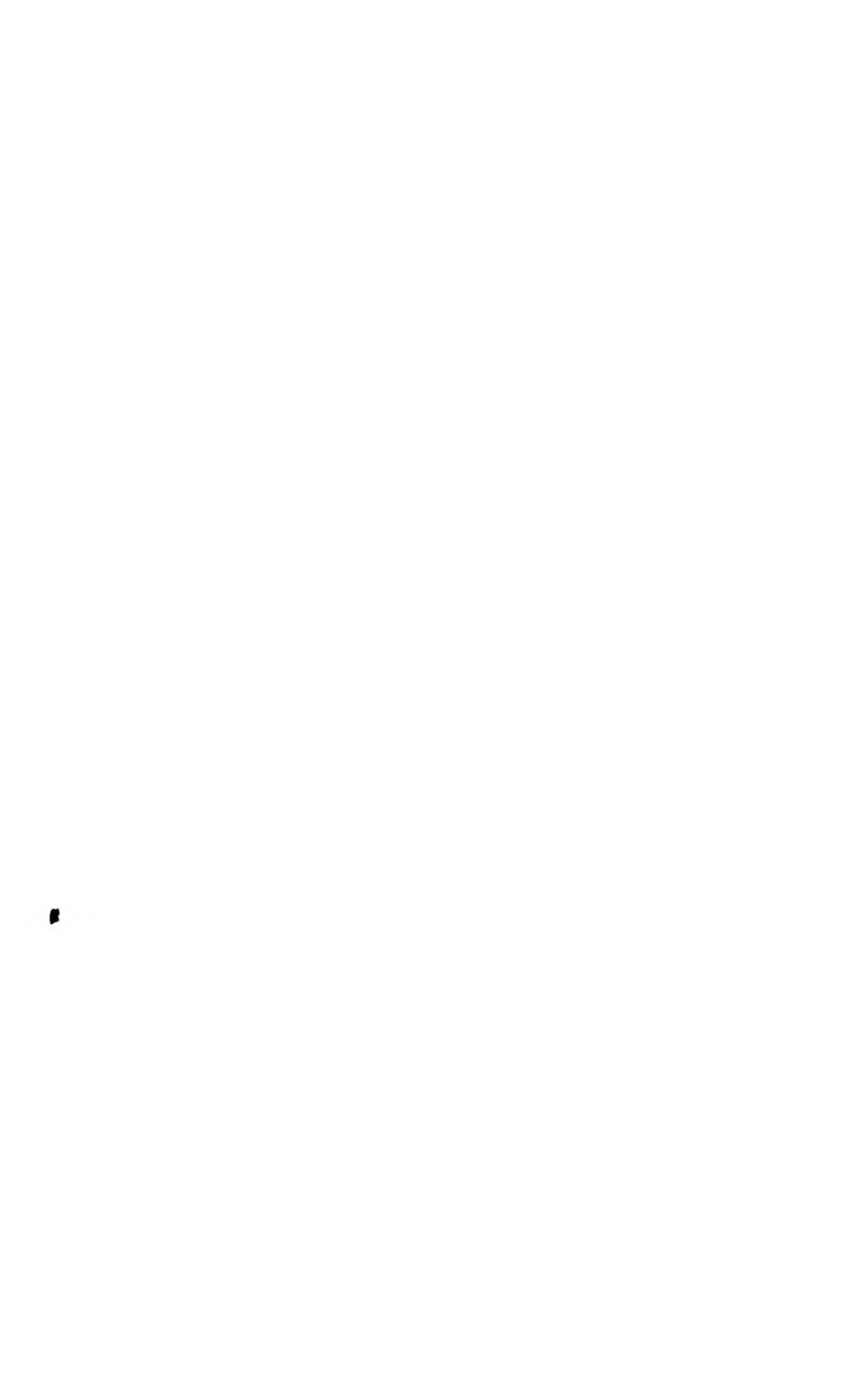
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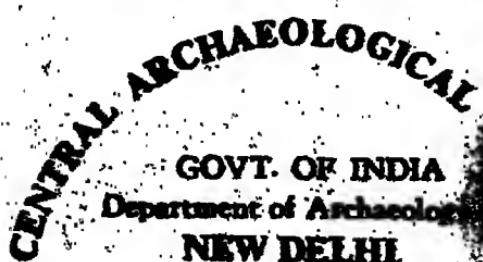
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